American Heart Journal

An international publication for the study of the circulation

GEORGE E. BURCH, M.D.
Editor

HARRY L. COLCOLOUGH, M.D.
NICHOLAS P. DEPASQUALE, M.D.
JOHN H. PHILLIPS, M.D.
Assistant editors

1430 Tulane Avenue, New Orleans, La. 70112
The C. V. Mosby Company, 3207 Washington Blvd., St. Louis, Mo., 63103

International editorial board

Walter H. Abelmann, *Boston*
R. P. Ahlquist, *Augusta*
Henry Barcroft, *London*
D. V. Bates, *Montreal*
A. Benchimol, *Phoenix*
S. Gilbert Blount, Jr., *Denver*
K. Braun, *Jerusalem*
Daniel A. Brody, *Memphis*
Henri Chevalier, *Paris*
William G. Cochran, *Cambridge*
James A. Cronvich, *New Orleans*
Arthur C. DeGraff, *New York*
Lewis Dexter, *Boston*
E. E. Eddleman, Jr., *Birmingham, Ala.*
Jesse E. Edwards, *St. Paul*
Charles Fisch, *Indianapolis*
Julian Frieden, *New Rochelle, N.Y.*
Mario R. García-Palmieri, *San Juan*
Arthur Grishman, *New York*
Herbert E. Griswold, *Portland, Ore.*
W. Proctor Harvey, *Washington, D.C.*
Paul Hugenholtz, *Rotterdam*
Herbert N. Hultgren, *Palo Alto*
Wlodzimierz Januszewicz, *Warsaw*
Andre Jouve, *Marseille*
P. I. Korner, *Sydney*
Richard Langendorf, *Chicago*
James J. Leonard, *Pittsburgh*
Maurice Lev, *Chicago*
Robert L. Levy, *New York*
Howard P. Lewis, *Portland, Ore.*
Jiri Linhart, *Prague*
Daniel S. Lukas, *New York*
Pavel E. Lukomsky, *Moscow*
Dwight C. McGoon, *Rochester, Minn.*
Donald Mainland, *New York*
Felipe Mendoza, *Mexico, D. F., Mex.*
Gordon K. Moe, *Utica, N. Y.*
Andrew G. Morrow, *Bethesda*
Clifford V. Nelson, *Portland, Me.*
Alfred Pick, *Chicago*
Walter H. Pritchard, *Cleveland*
Simon Rodbard, *Duarte*
D. G. Scarpelli, *Kansas City, Kan.*
Leonard Scherlis, *Baltimore*
V. Schrire, *Cape Town*
Ralph C. Scott, *Cincinnati*
Ewald E. Selkurt, *Indianapolis*
Arthur Selzer, *San Francisco*
John T. Shepherd, *Rochester, Minn.*
J. P. Shillingford, *London*
Ernst Simonson, *Minneapolis*
John R. Smith, *St. Louis*
Aly H. Sorour, *Cairo*
Pierre Soulie, *Paris*
Madison S. Spach, *Durham*
Ole Storstein, *Oslo*
Francesco Testoni, *Rome*
Tatsuya Tomomatsu, *Kobe, Japan*
William H. Weidman, *Rochester, Minn.*
Lars Werkö, *Göteborg*
R. F. Whelan, *Adelaide*
Ernst Wollheim, *Wurzburg, Germany*
Paul N. Yu, *Rochester, N.Y.*
Henry A. Zimmerman, *Cleveland*

VOLUME 79

JANUARY-JUNE, 1970

VOLUME 79
COPYRIGHT © 1970 BY
THE C. V. MOSBY COMPANY

All rights reserved

Printed in the United States of America

Author index*

A

ABAD, JOSE M. (*See* Calatayud et al.), 444
ABBOTT-SMITH, CHARLES W., AND CHOU, TE-CHUAN. Vectorcardiographic criteria for the diagnosis of left ventricular hypertrophy, 361
ABDALLAH, AHMED. (*See* Badran et al.), 648
ABERDEEN, EOIN. (*See* Stark, Tynan, and Aberdeen), 548
ABILDSKOV, J. A. (*See* Burgess, Millar, and Abildskov), 524
ADELMAN, A. G. (*See* Trent et al.), 539
AH-TYE, PERRY. (*See* Franciosi, Gay, and Ah-Tye), 676
AIWAZZADEH, S. (*See* Don Michael and Aiwazzadeh), 831
ALPERN, HARVEY. (*See* Blum et al.), 244
AOKI, VINCENT S., AND WILSON, WILLIAM R. Hydralazine and methyldopa in thiazide-treated hypertensive patients, 798
APIADO, ORLANDO. (*See* Hamby, Raia, and Apiado), 688
ARMSTRONG, WILLIAM T., JR. (*See* Elliott et al.), 215
AROESTY, JULIAN. (*See* Cohen, Morkin, and Aroesty), 332
ASTRÖM, H. (*See* Lee et al.), 318
ATSUMI, TOSHIYUKI. (*See* Shimamoto et al.), 5

B

BADRAN, AHMED M., EL-NAGGAR, ANAS M., ABDALLAH, AHMED, AND MAHMOUD, KAMAL A. Electrocardiographic changes following x-irradiation of the canine heart, 648
BANNAYAN, GEORGE A. (*See* Rosenquist et al.), 103
BARNER, HENDRICK B., JELLINEK, MAX, AND KAISER, GEORGE C. Effects of isoproterenol on myocardial structure and composition, 237
BARRETO, EGEU C. (*See* Benchimol, Barreto, and Tio), 603
BAULE, GERHARD M., AND MCFEE, RICHARD. The magnetic heart vector, 223
BEAMER, VIRGINIA L., AND MCDONALD, ROBERT H., JR. Failure of repeated diazoxide injections to modify the course of severe hypertension, 742
BENCHIMOL, A., BARRETO, EGEU C., AND TIO, STEPHEN. Phasic right atrium and superior vena cava flow velocity in patients with tricuspid insufficiency, 603
BENSON, PETER A. Anomalous aortic origin of coronary artery with sudden death: Case report and review, 254
BERKOWITZ, WALTER D. (*See* Damato et al.), 51
BEVEGÅRD, S. (*See* Lee et al.), 318
BLESA, MARTA I. (*See* Ross and Blesa), 96
BLOOR, COLIN M. (*See* Leon, Bloor, and Pitt), 384
BLUM, ROBERT L., ALPERN, HARVEY, JAFFE, HENRY, LANG, TZU-WANG, AND CORDAY, ELIOT. Determination of interarterial coronary anastomosis by radioactive spherules. Effect of coronary occlusion and hypoxemia, 244
BOWERS, JOEL M. (*See* Townes, Bowers, and Braun), 734
BRANDT, P. W. T. (*See* Norris et al.), 428 (Annot.)
BRAUN, HAROLD A. (*See* Townes, Bowers, and Braun), 734
BREST, ALBERT N. (*See* Seller et al.), 57
BREWER, GEORGE. (*See* VanderMolen et al.), 454
BRISTOW, J. DAVID. (*See* Kloster, Bristow, and Griswold), 175
BROWN, ROGER. (*See* Sloman and Brown), 761
BUCHELERES, H. GUENTHER. (*See* Lee et al.), 552
BURCH, G. E., AND GILES, T. D. Heart tone, 283 (Annot.)
——, ——, AND COLCOLOUGH, H. L. Ischemic cardiomyopathy, 291
——, ——, AND ——. A thought about donor hearts, 574 (Annot.)
——, WAJSZCZUK, W. J., AND CRONVICH, J. A. Spread of activation in the anterolateral papillary muscle of the left ventricle of the dog under normal and pathologic conditions, 769
——. Of the United States Government, history taking, and the physical examination, 848 (Annot.)
——. This is interesting, 721 (Annot.)
——. (*See* Giles and Burch), 141 (Annot.)
BURGESS, MARY JO, MILLAR, KAY, AND ABILDSKOV, J. A. The geometry of ventricular repolarization boundaries 524
BURKE, EDMUND C. (*See* Stickler et al.), 426 (Annot.)
BURTON, ROBERT M. (*See* Tsifutis, Burton, and Goldring), 88
BUSSMANN, W. D., RAUH, M., AND KRAYENBUEHL, H. P. Coronary and hemodynamic effects of myocardio-selective beta-receptor blockade by ICI 50172 in the closed-chest dog, 347

C

CACERES, C. A., AND HOCHBERG, H. M. Performance of the computer and physician in the analysis of the electrocardiogram, 439
CALATAYUD, JUAN B., ABAD, JOSE M., KHOI, NGUYEN B., STANBRO, WILLIAM W., AND SILVER, HAROLD M. P-wave changes in chronic obstructive pulmonary disease, 444
CALLAWAY, GEORGE M. (*See* Lindsay, Crawley, and Callaway), 390
CAMPEAU, LUCIEN. Myocardial infarction with normal selective coronary arteriograms, 139 (Annot.)
CANGIANO, JOSE. (*See* Seller et al.), 57
CAUGHEY, D. E. (*See* Norris et al.), 428 (Annot.)
CHALLICE, CYRIL E. (*See* Emberson and Challice), 653
CHESLER, E., FREIMAN, I., ROSEN, E., AND WILTON, E. Congenital aneurysm of the membranous ventricular septum associated with partial trisomy E syndrome, 805
CHILDERS, RODERICK W. (*See* Goldbarg et al.), 194
CHOU, TE-CHUAN. (*See* Abbott-Smith and Chou), 361
CHUNG, EDWARD K. Digitalis-induced cardiac arrhythmias, 845 (Annot.)
——. Unusual form of digitalis-induced triple A-V nodal rhythm, 250

*January, pp. 1-144; February, pp. 145-290; March, pp. 291-438; April, pp. 439-580; May, pp. 581-724; June, pp. 725-870.

COGAN, OSCAR J. (*See* McHenry et al.), 683
COHEN, STAFFORD I., MORKIN, EUGENE, AND AROESTY, JULIAN. Competitive rhythms with synchronous standby (demand) pacemakers, 332
——. (*See* Lau et al.), 201
COLCOLOUGH, H. L. (*See* Burch, Giles, and Colcolough), 291
——. (*See* Burch et al.), 574 (Annot.)
COLLIGNON, P. (*See* Kulbertus, Collignon, and Humblet), 293
COLLISON, D. (*See* Jose, Stitt, and Collison), 488
CONRAD, LOYAL L., AND TRENDLEY, ROBERT L. An interim visual display system for continuous monitoring of the ECG in coronary care units, 572 (Annot.)
CONWAY, JAMES. (*See* Sannerstedt and Conway), 122
COOK, G. C., AND KANYEREZI, B. R. Corneal arcus in the Ugandan African, 718 (Annot.)
COOPER, JAMES K. (*See* Klaus et al.). 471
CORDAY, ELIOT. (*See* Blum et al.), 244
CRAWLEY, I. SYLVIA. (*See* Lindsay, Crawley, and Callaway), 390
CRONVICH, J. A. (*See* Burch, Wajszczuk, and Cronvich), 769
CROXSON, M. S. (*See* Norris and Croxson), 728

D

DAMATO, ANTHONY N., BERKOWITZ, WALTER D., PATTON, ROBERT D., AND LAU, SUN H. The effect of diphenylhydantoin on atrioventricular and intraventricular conduction in man, 51
——. (*See* Lau et al.), 201
DAVES, MARVIN L., AND PRYOR, RAY. Cardiac positions, 408
DAVIES, D. M. (*See* Lal, Savidge, and Davies), 717 (Annot.)
DEGROOT, W. J., AND LEONARD, J. J. Hyperthyroidism as a high cardiac output state, 265
DELMAN, ABNER J. (*See* Rosenblum and Delman), 134
DIMICH, IVAN, STEINFELD, LEONARD, RICHMAN, ROBERT, AND LASSER, RICHARD. Treatment of recurrent paroxysmal ventricular tachycardia, 811
DOLGIN, MARTIN. Treatment of cardiac failure with glucagon, 843
DON MICHAEL, T. A., AND AIWAZZADEH, S. The effects of acute chloroquine poisoning with special reference to the heart, 831
DONOSO, EPHRAIM. (*See* Friedberg, Lyon, and Donoso), 44
——. (*See* Nevins et al.), 845 (Annot.)
DILLARD, DAVID H. (*See* Rittenhouse et al.), 167
DIXON, SEWELL H., JR. (*See* Nolan et al.), 668

E

EASTHOPE, R. N., AND IZUKAWA, T. Silent congenital mitral regurgitation, 816
EDWARDS, JESSE E. (*See* Lee et al.), 258
EGAN, J. D. (*See* Jarzobski et al.), 116
ELLIOTT, STANLEY E., MILLER, CHARLES W., ARMSTRONG, WILLIAM T., JR., AND OSBORN, JOHN J. The use of the digital computer in the study of patients during exercise-induced stress, 215
ELLIOTT, WILLIAM C. (*See* McHenry et al.), 683
EL-NAGGAR, ANAS M. (*See* Badran et al.), 648
EL SHERIF, NABIL, SHAHWAN, LOTFI, AND SOROUR, ALI H. The effect of acute thermal stress on general and pulmonary hemodynamics in the cardiac patient, 305
EMBERSON, JOHN W., AND CHALLICE, CYRIL E. Studies on the impulse conducting pathways in the atrium of the mammalian heart, 653
ESTES, E. HARVEY. (*See* Walston, Hackel, and Estes), 613

F

FERRY, J. (*See* Jarzobski et al.), 116
FILLMORE, S. J., SHAPIRO, M., AND KILLIP, T. Arterial oxygen tension in acute myocardial infarction. Serial analysis of clinical state and blood gas changes, 620
FISCH, CHARLES. (*See* Kleit et al.), 700
FISHER, R. DARRYL. (*See* Nolan et al.), 668
FITCH, D. M. (*See* Jarzobski et al.), 116
FOLKOW, BJÖRN. (*See* Yonce and Folkow), 1
FRANCIOSI, RALPH A., GAY, ROBERT M., AND AH-TYE, PERRY. Vascular hamartoma of the heart in a child, 676
FRANK, MARTIN J., NADIMI, MANOUCHEHR, MOSCHOS, CHRISTOS B., AND LEVINSON, GILBERT E. Left ventricular coronary flow, metabolism, and performance in mild congenital heart disease with increased left ventricular flow or pressure, 20
FREIMAN, I. (*See* Chesler et al.), 805
FRIEDBERG, CHARLES K., LYON, LEONARD J., AND DONOSO, EPHRAIM. Suppression of refractory recurrent ventricular tachycardia by transvenous rapid cardiac pacing and antiarrhythmic drugs, 44
——. (*See* Nevins et al.), 845 (Annot.)
FRIEDMAN, SANDOR A., SCHUB, HERBERT M., SMITH, EDWARD H., AND SOLOMON, NATHAN A. Perfusion defects in the aging lung, 160

G

GALYSH, FRED T. (*See* Sutton, Galysh, and Hagan), 630
GAY, ROBERT M. (*See* Franciosi, Gay, and Ah-Tye), 676
GILES, T. D., AND BURCH, G. E. Anesthesia, dogs, and cardiovascular data, 141 (Annot.)
——. (*See* Burch and Giles), 283 (Annot.)
——. (*See* Burch, Giles, and Colcolough), 291
——. (*See* Burch et al.), 574 (Annot.)
GITLOW, STANLEY E. (*See* Mendlowitz, Wolf, and Gitlow), 401
GLASSMAN, EPHRAIM, AND ROBERTS, GERALD S. A modified catheter tip for selective left coronary arteriography, 280 (Annot.)
GOLDBARG, ALBERTO N., MORAN, JOHN F., CHILDERS, RODERICK W., AND RICKETTS, HENRY T. Results and correlations of multistage exercise tests in a group of clinically normal business executives, 194
GOLDBERG, STANLEY J. (*See* Momma et al.), 80
GOLDRING, DAVID. (*See* Tsifutis, Burton, and Goldring), 88
GOULD, LAWRENCE. Cardiac effects of alcohol, 422
——. (*See* Zahir and Gould), 572 (Annot.)
GREEN, G. D., AND MACFARLANE, P. W. A cardiac vector indicator, 849 (Annot.)
GREEN, GEORGE E. Microvascular technique in coronary artery surgery, 276
GREENBERG, DONALD. (*See* Klaus et al.), 471
GRISWOLD, HERBERT E. (*See* Kloster, Bristow, and Griswold), 175
GROSS, H. (*See* Klein, Gross, and Rubin), 463

H

HACKEL, DONALD B. (*See* Walston, Hackel, and Estes), 613

HAFT, JACOB I. (*See* Lau et al.), 201
HAGAN, WILLIAM K. (*See* Sutton, Galysh, and Hagan), 630
HALE, G. S. (*See* Hirsh, McDonald, and Hale), 574 (Annot.)
HALLER, J. ALEX, JR. (*See* Rosenquist et al.), 103
HAMBURGER, RICHARD J. (*See* Kleit et al.), 700
HAMBY, ROBERT I., RAIA, FRANCIS, AND APIADO, ORLANDO. Aneurysm of the pars membranacea, 688
HARDISON, JOSEPH E., AND SHAPIRO, ROBERT F. Pulses—Visible and palpable, 431 (Annot.)
HARRIS, ALAN. The second heart sound in health and in pulmonary hypertension, 145
HARRISON, DONALD C. (*See* Nola, Pope, and Harrison), 499
HAYWOOD, L. JULIAN. (*See* Klass and Haywood), 752
HIBBS, GEORGE G. (*See* Lee et al.), 552
HIRSH, J., MCDONALD, I. G., AND HALE, G. S. Streptokinase therapy in acute major pulmonary embolism, 574 (Annot.)
HOCHBERG, H. M. (*See* Caceres and Hochberg), 439
HOLLEY, KEITH E. (*See* Stickler et al.), 426 (Annot.)
HONEYMAN, M. S. (*See* VanderMolen et al.), 454
HOOBLER, S. W. (*See* VanderMolen et al.), 454
HOOD, WILLIAM B. Experimental myocardial infarction. III. Recovery of left ventricular function in the healing phase. Contribution of increased fiber shortening in noninfarcted myocardium, 531
HUDSON, PAGE. (*See* Richardson et al.), 821
HULÍN, IVAN, AND RIPPA, SVEN. Why does the electrocardiogram of the dog change with a change in the foreleg position, 143 (Annot.)
HUMBLET, L. (*See* Kulbertus, Collignon, and Humblet), 293
HUMPHRIES, J. O'NEAL. (*See* Roberts, Humphries, and Morrow), 28

I

ISHIOKA, TADAO. (*See* Shimamoto et al.), 5
ISOKANE, NORIKO. (*See* Shimamoto et al.), 5
IZUKAWA, T. (*See* Easthope and Izukawa), 816

J

JACOBSON, WILLIAM W. (*See* Weisse et al.), 370
JAFFE, HENRY. (*See* Blum et al.), 244
JARZOBSKI, J., FERRY, J., WOMBOLT, D., FITCH, D. M., AND EGAN, J. D. Vasculitis with allopurinol therapy, 116
JELLINEK, MAX. (*See* Barner, Jellinek, and Kaiser), 237
JOHNSON, THOMAS. (*See* Lee et al.), 258
JONES, MARGARET Z. (*See* Richardson et al.), 821
JONSSON, B. (*See* Lee et al.), 318
JOSE, ANTHONY D., STITT, FRANK, AND COLLISON, D. The effects of exercise and changes in body temperature on the intrinsic heart rate in man, 488

K

KAISER, GEORGE C. (*See* Barner, Jellinek, and Kaiser), 237
KANYEREZI, B. R. (*See* Cook and Kanyerezi), 718 (Annot.)
KARK, ROBERT M. (*See* Schwartz, Pillay, and Kark), 427 (Annot.)
KARLÖF, I. (*See* Lee et al.), 318
KARNEGIS, JAMES N., AND KUBICEK, WILLIAM G. Physiological correlates of the cardiac thoracic impedance wave form, 519
——. (*See* Lee et al.), 258
KENNEDY, J. WARD. (*See* Kraunz and Kennedy), 36
KHOI, NGUYEN B. (*See* Calatayud et al.), 444
KILLIP, T. (*See* Fillmore, Shapiro, and Killip), 620
KIM, KWAN E. (*See* Seller et al.), 57
KISLAK, JAY WARD. The treatment of endocarditis, 713
KLASS, MICHAEL, AND HAYWOOD, L. JULIAN. Atrial fibrillation associated with acute myocardial infarction: A study of 34 cases, 752
KLAUS, ANDREW P., SARACHEK, NORMAN S., GREENBERG, DONALD, PEKOVER, JEAN, AND COOPER, JAMES K. Evaluating coronary care units, 471
KLEIN, H. O., GROSS, H., AND RUBIN, I. L. Transient electrocardiographic changes simulating myocardial infarction during open-heart surgery, 463
KLEIT, STUART A., HAMBURGER, RICHARD J., MARTZ, B. L., AND FISCH, CHARLES. Diuretic therapy–Current status, 700
KLOSTER, FRANK E., BRISTOW, J. DAVID, AND GRISWOLD, HERBERT E. Femoral artery occlusion following percutaneous catheterization, 175
KNOEBEL, SUZANNE B. (*See* McHenry et al.), 683
KNOSPE, WILLIAM H. (*See* Lee et al.), 552
KOHLI, KULDIP C. (*See* Wysham, Kohli, and Mulholland), 181
KRAUNZ, ROBERT F., AND KENNEDY, J. WARD. Ultrasonic determination of left ventricular wall motion in normal man, 36
KRAYENBUEHL, H. P. (*See* Bussmann, Rauh, and Krayenbuehl), 347
——. (*See* Simon et al.), 587
KROVETZ, L. JEROME. (*See* Rosenquist et al.), 103
KUBICEK, WILLIAM G. (*See* Karnegis and Kubicek), 519
KULBERTUS, H., COLLIGNON, P., AND HUMBLET, L. Vectorcardiographic study of the QRS loop in patients with left anterior focal block, 293

L

LAHMAN, J. E. (*See* Witham and Lahman), 149
LAL, S., SAVIDGE, R. S., AND DAVIES, D. M. Analgesics in myocardial infarction, 717 (Annot.)
LANG, TZU-WANG. (*See* Blum et al.), 244
LASSER, RICHARD. (*See* Dimich et al.), 811
LAU, SUN HING, COHEN, STAFFORD I., STEIN, EMANUEL, HAFT, JACOB I., ROSEN, KENNETH M., AND DAMATO, ANTHONY N. P waves and P loops in coronary sinus and left atrial rhythms, 201
——. (*See* Damato et al.), 51
LEE, A. J. (*See* Norris et al.), 428 (Annot.)
LEE, KYUNG SOON, JOHNSON, THOMAS, KARNEGIS, JAMES N., QUATTLEBAUM, FRANK W., AND EDWARDS, JESSE E. Clinical pathologic conference, 258
LEE, ROBERT E., JR., KNOSPE, WILLIAM H., BUCHELERES, H. GUENTHER, AND HIBBS, GEORGE G. Clinical pathologic conference, 552
LEE, SIMON J. K., JONSSON, B., BEVEGÅRD, S., KARLÖF, I., AND ASTRÖM, H. Hemodynamic changes at rest and during exercise in patients with aortic stenosis of varying severity, 318
LEHAN, PATRICK H. (*See* Pombo, Pilapil, and Lehan), 188
LEON, ARTHUR S., BLOOR, COLIN M., AND PITT, BERTRAM. The effects of dimethysulfoxide (DMSO) on the healing of experimental myocardial necrosis, 384
LEONARD, J. J. (*See* deGroot and Leonard), 265

LEVINSON, GILBERT E. (*See* Frank et al.), 20
——. (*See* Weisse et al.), 370
LINDE, LEONARD M. (*See* Momma et al.), 80
LINDSAY, JOSEPH, JR., CRAWLEY, I. SYLVIA, AND CALLAWAY, GEORGE M., JR. Chronic constrictive pericarditis following uremic hemopericardium, 390
LISTER, JOHN. Priorities and dilemmas in medical care, 725
LOWE, R. D., AND SCROOP, G. C. Effects of angiotensin on the autonomic nervous system, 563
LUNDGREN, OVE. Countercurrent exchange in the small intestine, 285 (Annot.)
LYON, LEONARD J. (*See* Friedberg, Lyon, and Donoso), 44

M

MCDANIEL, J. STUART. (*See* Witham and McDaniel), 335
MCDONALD, I. G. (*See* Hirsh, McDonald, and Hale), 574 (Annot.)
MCDONALD, ROBERT H., JR. (*See* Beamer and McDonald), 742
MACFARLANE, P. W. (*See* Green and Macfarlane), 849 (Annot.)
MCFEE, RICHARD. (*See* Baule and McFee), 223
MCGARVEY, JOSEPH F. X. Looped intra-atrial lead: A knotty problem, 720 (Annot.)
MCHENRY, PAUL L., COGAN, OSCAR J., ELLIOTT, WILLIAM C., AND KNOEBEL, SUZANNE B. False positive ECG response to exercise secondary to hyperventilation: Cineangiographic correlation, 683
MAGNIN, G. E. (*See* Voss and Magnin), 544
MAHMOUD, KAMAL A. (*See* Badran et al.), 648
MARTZ, B. L. (*See* Kleit et al.), 700
MATTES, LEONARD. (*See* Nevins et al.), 845 (Annot.)
MENDELSSOHN, SAUL. (*See* Seller et al.), 57
MENDLOWITZ, MILTON, WOLF, ROBERT L., AND GITLOW, STANLEY E. Cathecholamine metabolism in essential hypertension, 401
MERENDINO, K. ALVIN. (*See* Rittenhouse et al.), 167
MILLAR, KAY. (*See* Burgess, Millar, and Abildskov), 524
MILLER, CHARLES W. (*See* Elliott et al.), 215
MILLER, ROSS H. (*See* Stickler et al.), 426 (Annot.)
MOHRI, HITOSHI. (*See* Rittenhouse et al.), 167
MOMMA, KAZUO, LINDE, LEONARD M., GOLDBERG, STANLEY J., AND TAKAHASHI, MASATO. Effects of cardiac glycosides on the abnormal pulmonary circulation of the dog, 80
MOON, JOHN H. (*See* Richardson et al.), 821
MORAN, JOHN F. (*See* Goldbarg et al.), 194
MORGAN, BEVERLY C. (*See* Rittenhouse et al.), 167
MORKIN, EUGENE. (*See* Cohen, Morkin, and Aroesty), 332
MORRISON, JOHN. (*See* VanderMolen et al.), 454
MORROW, ANDREW G. (*See* Nolan et al.), 668
——. (*See* Roberts, Humphries, and Morrow), 28
MOSCHOS, CHRISTOS B. (*See* Frank et al.), 20
MOTOMIYA, TAKESHI. (*See* Shimamoto et al.), 5
MULHOLLAND, SANDRA. (*See* Wysham, Kohli, and Mulholland), 181

N

NADIMI, MANOUCHEHR. (*See* Frank et al.), 20
NEVINS, MICHAEL, MATTES, LEONARD, DONOSO, EPHRAIM, AND FRIEDBERG, CHARLES K. The use of quinidine with fixed-rate pacemakers, 845 (Annot.)
NOLA, GAETON T., POPE, STEVEN, AND HARRISON, DONALD C. Assessment of the synergistic relationship between serum calcium and digitalis, 499
NOLAN, STANTON P., FISHER, R. DARRYL, DIXON, SEWELL H., JR., WILLIAMS, WILLIS H., AND MORROW, ANDREW G. Alterations in left atrial transport and mitral valve blood flow resulting from aortic regurgitation, 668
NORRIS, R. M., BRANDT, P. W. T., CAUGHEY, D. E., LEE, A. J., AND SCOTT, P. J. A new coronary prognostic index, 428 (Annot.)
——, AND CROXSON, M. S. Bundle branch block in acute myocardial infarction, 728

O

O'BRIEN, M. F. (*See* Roeser, Powell, and O'Brien), 281 (Annot.)
ODAKURA, TSUTOMU. (*See* Yamazaki et al.), 640
ORESHKOV, VESSELIN I. A new mechanocardiographic index in evaluation of the severity of mitral stenosis: An apexcardiographic study, 789
OSBORN, JOHN J. (*See* Elliott et al.), 215

P

PARDI, MARIA T. (*See* Ragaza, Rectra, and Pardi), 396
PATTON, ROBERT D. (*See* Damato et al.), 51
PEKOVER, JEAN. (*See* Klaus et al.), 471
PILAPIL, VIRGILIO R. (*See* Pombo, Pilapil, and Lehan), 188
PILLAY, VEERASAMY K. G. (*See* Schwartz, Pillay, and Kark), 427 (Annot.)
PITT, BERTRAM. (*See* Leon, Bloor, and Pitt), 384
POMBO, EDMUNDO, PILAPIL, VIRGILIO R., AND LEHAN, PATRICK H. Aneurysm of the membranous ventricular septum, 188
POPE, STEVEN. (*See* Nola, Pope, and Harrison), 499
POWELL, L. W. (*See* Roeser, Powell, and O'Brien), 281 (Annot.)
PRETER, B. O. (*See* Simon et al.), 587
PRICHARD, B. N. C. Propranolol as an antihypertensive agent, 128
PRYOR, RAY. (*See* Daves and Pryor), 408

Q

QUATTLEBAUM, FRANK W. (*See* Lee et al.), 258

R

RAGAZA, EDGARDO P., RECTRA, EULOGIO H., AND PARDI, MARIA T. Intermittent complete heart block associated with swallowing as a complication of acute myocardial infarction, 396
RAIA, FRANCIS. (*See* Hamby, Raia, and Apiado), 688
RAUH, M. (*See* Bussmann, Rauh, and Krayenbuehl), 347
RECTRA, EULOGIO H. (*See* Ragaza, Rectra, and Pardi), 396
REGAN, Timothy J. (*See* Weisse et al.), 370
RESNEKOV, LEON. Electroconversion of cardiac dysrhythmias, 581
REYNOLDS, ERNEST W. (*See* Vander Ark and Reynolds), 481
RICHARDSON, DAVID W., JONES, MARGARET Z., MOON, JOHN H., AND HUDSON, PAGE. Clinical pathologic conference, 821
RICHMAN, HAROLD. (*See* Sotobata, Richman, and Simonson), 508
RICHMAN, ROBERT. (*See* Dimich et al.), 811
RICKETTS, HENRY T. (*See* Goldbarg et al.), 194
RIPPA, SVEN. (*See* Hulín and Rippa), 143 (Annot.)
RITTENHOUSE, EDWARD A., MOHRI, HITOSHI, MORGAN, BEVERLY C., DILLARD, DAVID H., AND MERENDINO, K. ALVIN. Electrocardiographic changes in infants undergoing surface-induced deep hypothermia for open-heart surgery, 167

ROBERTS, GERALD S. (*See* Glassman and Roberts), 280 (Annot.)
ROBERTS, WILLIAM C., HUMPHRIES, J. O'NEAL, AND MORROW, ANDREW G. Giant right atrium in rheumatic mitral stenosis, 28
ROESER, W. H. P., POWELL, L. W., AND O'BRIEN, M. F. Hemolysis after heterograft and prosthetic valve replacement, 281 (Annot.)
ROSEN, E. (*See* Chesler et al.), 805
ROSEN, KENNETH M. (*See* Lau et al.), 201
ROSENBLUM, ROBERT, AND DELMAN, ABNER J. Propranolol in the treatment of hyperkinetic heart syndrome, idiopathic hypertrophic subaortic stenosis, and systemic hypertension, 134
ROSENQUIST, GLENN C., KROVETZ, L. JEROME, HALLER, J. ALEX, JR., SIMON, ALLAN L., AND BANNAYAN, GEORGE A. Acquired right ventricular outflow obstruction in a child with neurofibromatosis, 103
ROSS, GORDON, AND BLESA, MARTA I. The effect of nicotine on the coronary circulation of dogs, 96
RUBIN, I. L. (*See* Klein, Gross, and Rubin), 463
RUTISHAUSER, W. (*See* Simon et al.), 587

S

SAFFA, ROBERT S. (*See* Weisse et al.), 370
SAKUMA, AKIRA. (*See* Shimamoto et al.), 5
SANNERSTEDT, RUNE, AND CONWAY, JAMES. Hemodynamic and vascular responses to antihypertensive treatment with adrenergic blocking agents: A review, 122
SANO, TADAHIRO. (*See* Yamazaki et al.), 640
SARACHEK, NORMAN S. (*See* Klaus et al.), 471
SAVIDGE, R. S. (*See* Lal, Savidge, and Davies), 717 (Annot.)
SCHAFFER, ABRAHAM I. Mechanism of the Wenckebach type of atrioventricular block, 138 (Annot.)
SCHUB, HERBERT M. (*See* Friedman et al.), 160
SCHWARTZ, FRANKLIN D., PILLAY, VEERASAMY K. G., AND KARK, ROBERT M. Ethacrynic acid: Its usefulness and untoward effects, 427 (Annot.)
SCOTT, P. J. (*See* Norris et al.), 428 (Annot.)
SCROOP, G. C. (*See* Lowe and Scroop), 563
SEGAR, WILLIAM E. (*See* Stickler et al.), 426 (Annot.)
SELLER, ROBERT H., CANGIANO, JOSE, KIM, KWAN E., MENDELSSOHN, SAUL, BREST, ALBERT N., AND SWARTZ, CHARLES. Digitalis toxicity and hypomagnesemia, 57
SHAHWAN, LOTFI. (*See* El Sherif, Lotfi, and Sorour), 305
SHAPIRO, M. (*See* Fillmore, Shapiro, and Killip), 620
SHAPIRO, ROBERT F. (*See* Hardison and Shapiro), 431 (Annot.)
SHIMAMOTO, TAKIO, ATSUMI, TOSHIYUKI, YAMASHITA, SEKIYA, MOTOMIYA, TAKESHI, ISOKANE, NORIKO, ISHIOKA, TADAO, AND SAKUMA, AKIRA. Clinical pharmacologic evaluation of the antiatherosclerotic agent, pyridinolcarbamate. A double-blind crossover trial in the treatment of atherosclerosis obliterans, 5
——. (*See* Yamazaki et al.), 640
SHIN, MYUNG H. (*See* Stickler et al.), 426 (Annot.)
SILVER, HAROLD M. (*See* Calatayud et al.), 444
SILVER, M. D. (*See* Trent et al.), 539
SIMON, ALLAN L. (*See* Rosenquist et al.), 103
SIMON, H., KRAYENBUEHL, H. P., RUTISHAUSER, W., AND PRETER, B. O. The contractile state of the hypertrophied left ventricular myocardium in aortic stenosis, 587
SIMONSON, ERNST. (*See* Sotobata, Richman, and Simonson), 508
SLOMAN, GRAEME. AND BROWN, ROGER. Hospital registration in patients with acute myocardial infarction, 761
SMITH, EDWARD H. (*See* Friedman et al.), 160
SOLOMON, NATHAN A. (*See* Friedman et al.), 160
SOROUR, ALI H. (*See* El Sherif, Lotfi, and Sorour), 305
SOTOBATA, IWAO, RICHMAN, HAROLD, AND SIMONSON, ERNST. Recognition of myocardial infarction by means of Frank lead Q/R ratios, 508
SOWTON, EDGAR. Emergency management of patients with "missed pacing," 458
SPENCER, FRANK C. Venous bypass grafts for occlusive disease of the coronary arteries, 568
STANBRO, WILLIAM W. (*See* Calatayud et al.), 444
STARK, JAROSLAV, TYNAN, MICHAEL, AND ABERDEEN, EOIN. Spontaneous closure of ventricular septal defect following pulmonary artery constriction (banding), 548
STEIN, EMANUEL. (*See* Lau et al.), 201
STEINFELD, LEONARD. (*See* Dimich et al.), 811
STICKLER, GUNNAR B., SHIN, MYUNG H., BURKE, EDMUND C., HOLLEY, KEITH E., MILLER, ROSS H., AND SEGAR, WILLIAM E. Diffuse glomerulonephritis associated with infected ventriculoatrial shunt, 426 (Annot.)
STITT, FRANK. (*See* Jose, Stitt, and Collison), 488
SUTTON, WILLIAM A., GALYSH, FRED T., AND HAGAN, WILLIAM K. Significant determinants of successful reversion of fibrillation by a new DC defibrillator, 630
SWARTZ, CHARLES. (*See* Seller et al.), 57

T

TAKAHASHI, MASATO. (*See* Momma et al.), 80
TAKEUCHI, KUNIO. (*See* Yamazaki et al.), 640
THORNE, JOSEPH L. (*See* Tsagaris and Thorne), 109
TIO, STEPHEN. (*See* Benchimol, Barreto, and Tio), 603
TOWNES, HARRY W., BOWERS, JOEL M., AND BRAUN, HAROLD A. Characteristics of innocent and stenotic cervical bruits, 734
TRENDLEY, ROBERT L. (*See* Conrad and Trendley), 572 (Annot.)
TRENT, J. K., ADELMAN, A. G., WIGLE, E. D., AND SILVER, M.D. Morphology of a prolapsed posterior mitral valve leaflet. 539
TSAGARIS, THEOFILOS J., AND THORNE, JOSEPH L. Effect of heart rate on hemodynamics in mitral stenosis, 109
TSIFUTIS, ARGIE, BURTON, ROBERT M., AND GOLDRING, DAVID. The effect of hypothermia and anoxia upon oxygen consumption and contractility of human and rat heart muscle, 88
TYNAN, MICHAEL. (*See* Stark, Tynan, and Aberdeen), 548

V

VANDER ARK, CONDON R., AND REYNOLDS, ERNEST W. Clinical evaluation of glucagon by continuous infusion in the treatment of low cardiac output states, 481
VANDERMOLEN, RONALD, BREWER, GEORGE, HONEYMAN, M. S., MORRISON, JOHN, AND HOOBLER, S. W. A study of hypertension in twins, 454
VOSS, D. M., AND MAGNIN, G. E. Demand pacing and carotid sinus syncope, 544

W

WAJSZCZUK, W. J. (*See* Burch, Wajszczuk, and Cronvich), 769

WALSTON, ABE, HACKEL, DONALD B., AND ESTES, E. HARVEY. Acute coronary occlusion and the "power failure" syndrome, 613
WEISSE, ALLEN B., SAFFA, ROBERT S., LEVINSON, GILBERT E., JACOBSON, WILLIAM W., AND REGAN, TIMOTHY. Left ventricular function during the early and late stages of scar formation following experimental myocardial infarction, 370
WEXLER, BERNARD C. Serum creatine phosphokinase activity following isoproterenol-induced myocardial infarction in male and female rats with and without arteriosclerosis. 69
WIGLE, E. D. (*See* Trent et al.), 539
WILLIAMS, WILLIS H. (*See* Nolan et al.), 668
WILSON, WILLIAM R. (*See* Aoki and Wilson), 798
WILTON, E. (*See* Chesler et al.), 805
WITHAM, A. C., AND LAHMAN, J. E. Vectorcardiogram past forty, 149
——, AND MCDANIEL, J. STUART. Electrocardiogram, vectorcardiogram, and hemodynamics in ventricular septal defect, 335
WOLF, ROBERT L. (*See* Mendlowitz, Wolf, and Gitlow), 401
WOMBOLT, D. (*See* Jarzobski et al.), 116
WYSHAM, DONALD N., KOHLI, KULDIP C., AND MULHOLLAND, SANDRA. Coronary risk factors in Northern India, 181

Y

YAMASHITA, SEKIYA. (*See* Shimamoto et al.), 5
YAMAZAKI, HIROH, SANO, TADAHIRO, ODAKURA, TSUTOMU, TAKEUCHI, KUNIO, AND SHIMAMOTO, TAKIO. Electrocardiographic and hematological changes by exercise test in coronary patients and pyridinolcarbamate pretreatment. A double-blind crossover trial, 640
YONCE, LLOYD R., AND FOLKOW, BJÖRN. The integration of the cardiovascular response to diving, 1

Z

ZAHIR, MOHAMMAD, AND GOULD, LAWRENCE. A new method for measurement of blood pressure in clinical shock, 572 (Annot.)

Subject index*

A

Acid, ethacrynic: its usefulness and untoward effects (Schwartz, Pillay, and Kark), 427 (Annot.)

Adrenergic blocking agents, hemodynamic and vascular responses to antihypertensive treatment with: a review (Sannerstedt and Conway), 122

African, Ugandan, corneal arcus in (Cook and Kanyerezi), 718 (Annot.)

Age. (*See* under Forty.)

Aging lung, perfusion defects in (Friedman et al.), 160

Alcohol, cardiac effects of (Gould), 422

Allopurinol therapy, vasculitis with (Jarzobski et al.), 116

Analgesics in myocardial infarction (Lal, Savidge, and Davies), 717 (Annot.)

Anastomosis, coronary, interarterial, determination of, by radioactive spherules; effect of coronary occlusion and hypoxemia (Blum et al.) 244

Anesthesia, dogs, and cardiovascular data (Giles and Burch), 141 (Annot.)

Aneurysm, congenital, of the membranous ventricular septum associated with partial trisomy E syndrome (Chesler et al.), 805
of the membranous ventricular septum (Pombo, Pilapil, and Lehan), 188
of the pars membranacea (Hamby, Raia, and Apiado), 688

Angiotensin, effects of, on autonomic nervous system (Lowe and Scroop), 562

Announcements, 438, 724

Anoxia and hypothermia, effect of, upon oxygen consumption and contractility of human and rat heart muscle (Tsifutis, Burton, and Goldring), 88

Anterolateral papillary muscle of the left ventricle of the dog, spread of activation in, under normal and pathologic conditions (Burch, Wajszczuk, and Cronvich), 769

Antiatherosclerotic agent, pyridinolcarbamate, clinical pharmacologic evaluation of; a double-blind crossover trial in the treatment of atherosclerosis obliterans (Shimamoto et al.), 5

Antihypertensive agent, propranolol as an (Prichard), 128
treatment with adrenergic blocking agents, hemodynamic and vascular responses to: a review (Sannerstedt and Conway), 122

Aortic origin, anomalous, of coronary artery with sudden death: case report and review (Benson), 254

Aortic—Cont'd
regurgitation, alterations in left atrial transport and mitral valve blood flow resulting from (Nolan et al.), 668
stenosis, contractile state of the hypertrophied left ventricular myocardium in (Simon et al.), 587
of varying severity, patients with, hemodynamic changes at rest and during exercise in (Lee et al.), 318

Apexcardiographic study: a new mechanocardiographic index in evaluation of the severity of mitral stenosis (Oreshkov), 789

Arcus, corneal, in the Ugandan African (Cook and Kanyerezi), 718 (Annot.)

Arrhythmias, cardiac, digitalis-induced (Chung), 845 (Annot.)
(*See* under Dysrhythmias.)

Arterial oxygen tension in acute myocardial infarction; serial analysis of clinical state and blood gas changes (Fillmore, Shapiro, and Killip), 620

Arteriograms, coronary, normal selective, myocardial infarction with (Campeau), 139 (Annot.)

Arteriography, left coronary, selective, modified catheter tip for (Glassman and Roberts), 280 (Annot.)

Arteriosclerosis, in male and female rats, serum creatine phosphokinase activity following isoproterenol-induced myocardial infarction with and without (Wexler), 69

Arteries, coronary, anomalous aortic origin of, with sudden death: case report and review (Benson), 254
occlusive disease of, venous bypass grafts for (Spencer), 568
surgery, microvascular technique in (Green), 276
femoral, occlusion following percutaneous catheterization (Kloster, Bristow, and Griswold), 175
pulmonary, constriction (banding), spontaneous closure of ventricular septal defect following (Stark, Tynan, and Aberdeen), 548

Atherosclerosis obliterans, treatment of double-blind crossover trial in; clinical pharmacologic evaluation of antiatherosclerotic agent, pyridinolcarbamate (Shimamoto et al.), 5

Atrial fibrillation associated with acute myocardial infarction: a study of 34 cases (Klass and Haywood), 752
left, and coronary sinus rhythms, P waves and P loops in (Lau et al.), 201
transport and mitral valve blood flow, alterations in, resulting from aortic regurgitation (Nolan et al.), 668

*January, pp. 1-144; February, pp. 145-290; March, pp. 291-438; April, pp. 439-580; May, pp. 581-724; June, pp. 725-870.

Atrioventricular block, Wenckebach type of, mechanism of (Schaffer), 138 (Annot.)
and intraventricular conduction in man, effect of diphenylhydantoin on (Damato et al.), 51
Atrium of the mammalian heart, studies on the impulse conducting pathways in (Emberson and Challice), 653
right, giant, in rheumatic mitral stenosis (Roberts, Humphries, and Morrow), 28
phasic, and superior vena cava flow velocity in patients with tricuspid insufficiency (Benchimol, Barreto, and Tio), 603
Autonomic nervous system, effects of angiotensin on (Lowe and Scroop), 562
A-V nodal rhythm, triple, digitalis-induced, unusual form of (Chung), 250

B

Banding (pulmonary artery constriction), spontaneous closure of ventricular septal defect following (Stark, Tynan, and Aberdeen), 548
Beta-receptor blockade, myocardio-selective, by ICI 50172, coronary and hemodynamic effects of, in the closed-chest dog (Bussmann, Rauh, and Krayenbuehl), 347
Block, atrioventricular, Wenckebach type of, mechanism of (Schaffer), 138 (Annot.)
bundle, branch, in acute myocardial infarction (Norris and Croxson), 728
focal, anterior, left, vectorcardiographic study of QRS loop in patients with (Kulbertus, Collignon, and Humblet), 293
heart, intermittent complete, associated with swallowing as a complication of acute myocardial infarction (Ragaza, Rectra, and Pardi), 396
Blockade, beta-receptor, myocardio-selective, by ICI 50172, coronary and hemodynamic effects of, in the closed-chest dog (Bussmann, Rauh, and Krayenbuehl), 347
Blocking agents, adrenergic, hemodynamic and vascular responses to antihypertensive treatment with: a review (Sannerstedt and Conway), 122
Blood flow, mitral valve, and left atrial transport, alterations in, resulting from aortic regurgitation (Nolan et al.), 668
gas and clinical state changes, serial analysis of; arterial oxygen tension in acute myocardial infarction (Fillmore, Shapiro, and Killip), 620
pressure, new method for measurement of, in clinical shock (Zahir and Gould), 572 (Annot.)
Book reviews, 144, 289, 434, 580, 723, 851
Bruits, cervical, innocent and stenotic, characteristics of (Townes, Bowers, and Braun), 734
Bundle branch block in acute myocardial infarction (Norris and Croxson), 728
Business executives, clinically normal, results and correlations of multistage exercise tests in (Goldbarg et al.), 194
Bypass grafts, venous, for occlusive disease of the coronary arteries (Spencer), 568

C

Calcium, serum, and digitalis, synergistic relationship between, assessment of (Nola, Pope, and Harrison), 499
Canine heart, x-irradiation of, electrocardiographic changes following (Badran et al.), 648
Cardiac arrhythmias, digitalis-induced (Chung), 845 (Annot.)
dysrhythmias, electroconversion of (Resnekov), 581
effects of alcohol (Gould), 422
failure, treatment of, with glucagon (Dolgin), 843
glycosides, effects of, on the abnormal pulmonary circulation of the dog (Momma et al.), 80
output state, high, hyperthyroidism as (deGroot and Leonard), 265
low, treatment of by continuous infusion of glucagon, clinical evaluation of (Vander Ark and Reynolds), 481
pacing, transvenous rapid, and antiarrhythmic drugs, suppression of refractory recurrent ventricular tachycardia by (Friedberg, Lyon, and Donoso), 44
patient, effect of acute thermal stress on general and pulmonary hemodynamics in (El Sherif, Shahwan, and Sorour), 305
positions (Daves and Pryor), 408
thoracic impedance waveform, physiological correlates of (Karnegis and Kubicek), 519
vector indicator (Green and Macfarlane), 849 (Annot.)
Cardiomyopathy, ischemic (Burch, Giles, and Colcolough), 291
Cardiovascular data, anesthesia, and dogs (Giles and Burch), 141 (Annot.)
response to diving, integration of (Yonce and Folkow), 1
Care, medical, priorities and dilemmas in (Lister), 725
units, coronary, continuous monitoring of the ECG in, an interim visual display system for (Conrad and Trendley), 572 (Annot.) evaluating (Klaus et al.), 471
Carotid sinus syncope and demand pacing (Voss and Magnin), 544
Catecholamine metabolism in essential hypertension (Mendlowitz, Wolf, and Gitlow), 401
Catheter tip, modified, for selective left coronary arteriography (Glassman and Roberts), 281 (Annot.)
Catheterization, percutaneous, femoral artery occlusion following (Kloster, Bristow, and Griswold), 175
Cervical bruits, innocent and stenotic, characteristics of (Townes, Bowers, and Braun), 734
Child with neurofibromatosis, acquired right ventricular outflow obstruction in a (Rosenquist et al.), 103
vascular hamartoma of the heart of (Franciosi, Gay, and Ah-Tye), 676
Chloroquine poisoning, acute, effects of, with special reference to the heart (Don Michael and Aiwazzadeh), 831
Cineangiographic correlation: false positive ECG response to exercise secondary to hyperventilation (McHenry et al.), 683
Circulation, coronary, of dogs, effect of nicotine on (Ross and Blesa), 96
pulmonary, abnormal, of dog, effects of cardiac glycosides on (Momma et al.), 80
Classification, cardiac. (*See* under Cardiac positions.)

Clinical pathologic conference (Lee et al.), 258
(Lee et al.), 552
(Richardson et al.), 821

Computer, digital, use of, in study of patients during exercise-induced stress (Elliott et al.), 215
and physician, performance of, in analysis of the electrocardiogram (Caceres and Hochberg), 439

Conduction, atrioventricular and intraventricular, in man, effect of diphenylhydantoin on (Damato et al.), 51

Congenital aneurysm of the membranous ventricular septum associated with partial trisomy E syndrome (Chesler et al.), 805
corrected transposition of the great vessels of the heart; this is interesting (Burch), 721 (Annot.)
heart disease, mild, with increased left ventricular flow or pressure, left ventricular coronary flow, metabolism, and performance in (Frank et al.), 20
mitral regurgitation, silent (Easthope and Izukawa), 816

Constriction, pulmonary artery, (banding), spontaneous closure of ventricular septal defect following (Stark, Tynan, and Aberdeen), 548

Contractile state of the hypertrophied left ventricular myocardium in aortic stenosis (Simon et al.), 587

Contractility and oxygen consumption of human and rat heart muscle, effect of hypothermia and anoxia upon (Tsifutis, Burton, and Goldring), 88

Corneal arcus in the Ugandan African (Cook and Kanyerezi, 718 (Annot.)

Coronary anastomosis, interarterial, determination of, by radioactive spherules; effect of coronary occlusion and hypoxemia (Blum et al.), 244
arteriograms, normal selective, myocardial infarction with (Campeau), 139 (Annot.)
artery, anomalous aortic origin of, with sudden death: case report and review (Benson), 254
occlusive disease of, venous bypass grafts for (Spencer), 568
surgery, microvascular technique in (Green), 276
care units, continuous monitoring of the ECG in, an interim visual display system for (Conrad and Trendley), 572 (Annot.)
evaluating (Klaus et al.), 471
circulation of dogs, effect of nicotine on (Ross and Blesa), 96
and hemodynamic effects of myocardio-selective beta-receptor blockade by ICI 50172 in the closed-chest dog (Bussmann, Rauh, and Krayenbuehl), 347
left, arteriography, selective, modified catheter tip for (Glassman and Roberts), 280 (Annot.)
ventricular, flow, metabolism, and performance in mild congenital heart disease with increased left ventricular flow or pressure (Frank et al.), 20
occlusion, acute, and the "power failure" syndrome (Walston, Hackel, and Estes), 613
patients, electrocardiographic and hematological changes by exercise test in, and pyridinolcarbamate pretreatment; a double-blind crossover trial (Yamazaki et al.), 640

Coronary—Cont'd
prognostic index, new (Norris et al.), 428 (Annot.)
risk factors in Northern India (Wysham, Kohli, and Mulholland), 181
sinus and left atrial rhythms, P waves and P loops in (Lau et al.), 201

Countercurrent exchange in the small intestine (Lundgren), 285 (Annot.)

D

Defibrillator, DC, new, significant determinants of successful reversion of fibrillation by (Sutton, Galysh, and Hagan), 630

Demand pacing and carotid sinus syncope (Voss and Magnin), 544
(synchronous standby) pacemakers, competitive rhythms with (Cohen, Morkin, and Aroesty), 332

Diazoxide injections, repeated, failure of, to modify the course of severe hypertension (Beamer and McDonald), 742

Diet. (*See* under Coronary risk factors.)

Digital computer, use of, in study of patients during exercise-induced stress (Elliott et al.), 215

Digitalis-induced cardiac arrhythmias (Chung), 845 (Annot.)
triple A-V nodal rhythm, unusual form of (Chung), 250
and serum calcium, synergistic relationship between, assessment of (Nola, Pope, and Harrison), 499
toxicity and hypomagnesemia (Seller et al.), 57

Dimethylsulfoxide (DMSO), effects of, on the healing of experimental myocardial necrosis (Leon, Bloor, and Pitt), 384

Diphenylhydantoin, effect of, on atrioventricular and intraventricular conduction in man (Damato et al.), 51

Diuretic therapy–current status (Kleit et al.), 700

Diving, cardiovascular response to, integration of (Yonce and Folkow), 1

DMSO (dimethylsulfoxide), effects of, on the healing of experimental myocardial necrosis (Leon, Bloor, and Pitt), 384

Dog(s), abnormal pulmonary circulation of, effects of cardiac glycosides on (Momma et al.), 80
anesthesia, and cardiovascular data (Giles and Burch), 141 (Annot.)
anterolateral papillary muscle of the left ventricle of, spread of activation in, under normal and pathologic conditions (Burch, Wajszczuk, and Cronvich), 769
closed-chest, coronary and hemodynamic effects of myocardio-selective beta-receptor blockade by ICI 50172 in (Bussmann, Rauh, and Krayenbuehl), 347
coronary circulation of, effect of nicotine on (Ross and Blesa), 96
electrocardiogram of, why does it change with change in foreleg position (Hulín and Rippa), 143 (Annot.)

Donor hearts, a thought about (Burch, Giles, and Colcolough), 574 (Annot.)

Dysrhythmias, cardiac, electroconversion of (Resnekov), 581

E

Electrocardiogram, analysis of, performance of computer and physician in (Caceres and Hochberg), 439
continuous monitoring of, an interim visual display system for, in coronary care units (Conrad and Trendley), 572 (Annot.)
of dog, why does it change with change in foreleg position (Hulín and Rippa), 143 (Annot.)
response, false positive, to exercise secondary to hyperventilation: cineangiographic correlation (McHenry et al.), 683
vectorcardiogram, and hemodynamics in ventricular septal defect (Witham and McDaniel), 335

Electrocardiographic changes following x-irradiation of the canine heart (Badran et al.), 648
in infants undergoing surface-induced deep hypothermia for open-heart surgery (Rittenhouse et al.), 167
transient, simulating myocardial infarction during open-heart surgery (Klein, Gross, and Rubin), 463
and hematological changes by exercise test in coronary patients and pyridinolcarbamate pretreatment; a double-blind crossover trial (Yamazaki et al.), 640

Electroconversion of cardiac dysrhythmias (Resnekov), 581

Embolism, pulmonary, major, acute, streptokinase therapy in (Hirsh, McDonald, and Hale), 574 (Annot.)

Endocarditis, treatment of (Kislak), 713

Ethacrynic acid: its usefulness and untoward effects (Schwartz, Pillay, and Kark), 427 (Annot.)

Examination, physical, history taking, and the United States Government (Burch), 848 (Annot.)

Exercise and changes in body temperature, effects of, on the intrinsic heart rate in man (Jose, Stitt, and Collison), 488
false positive ECG response to, secondary to hyperventilation: cineangiographic correlation (McHenry et al.), 683
induced stress, study of patients during, with use of digital computer (Elliott et al.), 215
and at rest, hemodynamic changes, in patients with aortic stenosis of varying severity (Lee et al.), 318
test, electrocardiographic and hematological changes by, in coronary patients and pyridinolcarbamate pretreatment; a double-blind crossover trial (Yamazaki et al.), 640
multistage, results and correlations of, in group of clinically normal business executives (Goldbarg et al.), 194

(*See* also under Coronary risk factors.)

F

Femoral artery occlusion following percutaneous catheterization (Kloster, Bristow, and Griswold), 175

Fibrillation, atrial, associated with acute myocardial infarction: a study of 34 cases (Klass and Haywood), 752
successful reversion of, significant determinants of, by a new DC defibrillator (Sutton, Galysh, and Hagan), 630

Fixed-rate pacemakers, use of quinidine with (Nevins et al.), 845 (Annot.)

Flow, blood, mitral valve, and left atrial transport, alterations in, resulting from aortic regurgitation (Nolan et al.), 668
coronary, left ventricular, metabolism, and performance in mild congenital heart disease with increased left ventricular flow or pressure (Frank et al.), 20
velocity, superior vena cava, and phasic right atrium in patients with tricuspid insufficiency (Benchimol, Barreto, and Tio), 603

Focal block, anterior, left, vectorcardiographic study of QRS loop in patients with (Kulbertus, Collignon, and Humblet), 293

Foreleg position, why does electrocardiogram of dog change with change in (Hulín and Rippa), 143 (Annot.)

Forty, vectorcardiogram past (Witham and Lahman), 149

Frank lead Q/R ratios, recognition of myocardial infarction by means of (Sotobata, Richman, and Simonson), 508

G

Gas, blood, and clinical state changes, serial analysis of; arterial oxygen tension in acute myocardial infarction (Fillmore, Shapiro, and Killip), 620

Glomerulonephritis, diffuse, associated with infected ventriculoatrial shunt (Stickler et al.), 426 (Annot.)

Glucagon by continuous infusion, clinical evaluation of, in treatment of low cardiac output states (Vander Ark and Reynolds), 481
treatment of cardiac failure with (Dolgin), 843

Glycosides, cardiac, effects of, on abnormal pulmonary circulation of dog (Momma et al.), 80

Grafts, venous bypass, for occlusive disease of the coronary arteries (Spencer), 568

H

Hamartoma, vascular, of the heart in a child (Franciosi, Gay, and Ah-Tye), 676

Heart(s) block, intermittent complete, associated with swallowing as a complication of acute myocardial infarction (Ragaza, Rectra, and Pardi), 396
canine, x-irradiation of, electrocardiographic changes following (Badran et al.), 648
disease, mild congenital, left ventricular coronary flow, metabolism, and performance in, with increased left ventricular flow or pressure (Frank et al.), 20
donor, a thought about (Burch, Giles, and Colcolough), 574 (Annot.)
effects of acute chloroquine poisoning with special reference to (Don Michael and Aiwazzadeh), 831
mammalian, atrium of, studies on the impulse conducting pathways in (Emberson and Challice), 653
muscle, rat and human, effect of hypothermia and anoxia upon oxygen consumption and contractility of (Tsifutis, Burton, and Goldring), 88
open-, surgery, surface-induced deep hypothermia for, infants undergoing, electrocardiographic changes in (Rittenhouse et al.), 167
transient electrocardiographic changes simulating myocardial infarction during (Klein, Gross, and Rubin), 463

Heart(s)—Cont'd
rate, effect of, on hemodynamics in mitral stenosis (Tsagaris and Thorne), 109
intrinsic, in man, effects of exercise and changes in body temperature on (Jose, Stitt, and Collison), 488
sound, second, in health and in pulmonary hypertension (Harris), 145
syndrome, hyperkinetic, idiopathic hypertrophic subaortic stenosis, and systemic hypertension, propranolol in the treatment of (Rosenblum and Delman), 134
tone (Burch and Giles), 283 (Annot.)
vascular hamartoma of, in a child (Franciosi, Gay, and Ah-Tye), 676
vector, magnetic (Baule and McFee), 223

Heat. (*See* under Thermal stress.)

Hemodynamic(s) changes at rest and during exercise in patients with aortic stenosis of varying severity (Lee et al.), 318
and coronary effects of myocardio-selective beta-receptor blockade by ICI 50172 in the closed-chest dog (Bussmann, Rauh, and Krayenbuehl), 347
electrocardiogram, and vectorcardiogram in ventricular septal defect (Witham and McDaniel), 335
general and pulmonary, effect of acute thermal stress on, in the cardiac patient (Sherif, Shahwan, and Sorour), 305
in mitral stenosis (Tsagaris and Thorne), 109
and vascular responses to antihypertensive treatment with adrenergic blocking agents: a review (Sannerstedt and Conway), 122

Hematological and electrocardiographic changes by exercise test in coronary patients and pyridinolcarbamate pretreatment; a double-blind crossover trial (Yamazaki et al.), 640

Hemolysis after heterograft and prosthetic valve replacement (Roeser, Powell, and O'Brien), 281 (Annot.)

Hemopericardium, uremic, chronic constrictive pericarditis following (Lindsay, Crawley, and Callaway), 390

Heterograft and prosthetic valve replacement, hemolysis after (Roeser, Powell, and O'Brien), 281 (Annot.)

History taking, the physical examination, and the United States Government (Burch), 848 (Annot.)

Hospital registration in patients with acute myocardial infarction (Sloman and Brown), 761

Hydralazine and methyldopa in thiazide-treated hypertensive patients (Aoki and Wilson), 798

Hyperkinetic heart syndrome, idiopathic hypertrophic subaortic stenosis, and systemic hypertension, propranolol in the treatment of (Rosenblum and Delman), 134

Hypertension, essential, cathecholamine metabolism in (Mendlowitz, Wolf, and Gitlow), 401
pulmonary, and health, second heart sound in (Harris), 145
severe, failure of repeated diazoxide injections to modify the course of (Beamer and McDonald), 742

Hypertension—Cont'd
systemic, hyperkinetic heart syndrome, and idiopathic hypertrophic subaortic stenosis, propranolol in the treatment of (Rosenblum and Delman), 134
in twins, study of (VanderMolen et al.), 454
(*See* also under Antihypertensive.)

Hypertensive patients, thiazide-treated, hydralazine and methyldopa in (Aoki and Wilson), 798

Hyperthyroidism as a high cardiac output state (deGroot and Leonard), 265

Hypertrophied left ventricular myocardium, contractile state of, in aortic stenosis (Simon et al.), 587

Hypertrophy, left ventricular, vectorcardiographic criteria for diagnosis of (Abbott-Smith and Chou), 361

Hyperventilation, false positive ECG response to exercise secondary to: cineangiographic correlation (McHenry et al.), 683

Hypomagnesemia and digitalis toxicity (Seller et al.), 57

Hypothermia and anoxia, effect of, upon oxygen consumption and contractility of human and rat heart muscle (Tsifutis, Burton, and Goldring), 88
deep, surface-induced, infants undergoing, for open-heart surgery, electrocardiographic changes in (Rittenhouse et al.), 167

Hypoxemia and coronary occlusion, effect of; determination of interarterial coronary anastomosis by radioactive spherules (Blum et al.), 244

I

Impedance waveform, cardiac thoracic, physiological correlates of (Karnegis and Kubicek), 519

Impulse conducting pathways in the atrium of the mammalian heart, studies on (Emberson and Challice), 653

India, Northern, coronary risk factors in (Wysham, Kohli, and Mulholland), 181

Infants undergoing surface-induced deep hypothermia for open-heart surgery, electrocardiographic changes in (Rittenhouse et al.), 167

Infarction, myocardial, acute, arterial oxygen tension in. Serial analysis of clinical state and blood gas changes (Fillmore, Shapiro, and Killip), 620
associated with atrial fibrillation: a study of 34 cases (Klass and Haywood), 752
bundle branch block in (Norris and Croxson), 728
intermittent complete heart block, associated with swallowing as complication of (Ragaza, Rectra, and Pardi), 396
patients with, hospital registration in (Sloman and Brown), 761
analgesics in (Lal, Savidge, and Davies), 717 (Annot.)
experimental, left ventricular function during the early and late stages of scar formation following (Weisse et al.). 370
III. Recovery of left ventricular function in the healing phase; contribution of increased fiber shortening in noninfarcted myocardium (Hood), 531

Infarction—Cont'd
isoproterenol-induced, serum creatine phosphokinase activity following, in male and female rats with and without arteriosclerosis (Wexler), 69
with normal selective coronary arteriograms (Campeau), 139 (Annot.)
recognition of, by means of Frank lead Q/R ratios (Sotobata, Richman, and Simonson), 508
transient electrocardiographic changes simulating, during open-heart surgery (Klein, Gross, and Rubin), 463

Insufficiency, tricuspid, phasic right atrium and superior vena cava flow velocity in patients with (Benchimol, Barreto, and Tio), 603

Interarterial coronary anastomosis, determination of, by radioactive spherules; effect of coronary occlusion and hypoxemia (Blum et al.), 244

Interventricular septum. (*See* under Pars membranacea.)

Intestine, small, countercurrent exchange in (Lundgren), 285 (Annot.)

Intra-atrial lead, looped: a knotty problem (McGarvey), 720 (Annot.)

Intraventricular and atrioventricular conduction in man, effect of diphenylhydantoin on (Damato et al.), 51

Ischemic cardiomyopathy (Burch, Giles, and Colcolough), 291

Isoproterenol-induced myocardial infarction, serum creatine phosphokinase activity following, in male and female rats with and without arteriosclerosis (Wexler), 69
infusion, effects of, on myocardial structure and composition (Barner, Jellinek, and Kaiser), 237

L

Lead, intra-atrial, looped: a knotty problem (McGarvey), 720 (Annot.)

Leaflet, mitral valve, posterior, prolapsed, morphology of (Trent et al.), 539

Left anterior focal block, vectorcardiographic study of QRS loop in patients with (Kulbertus, Collignon, and Humblet), 293
atrial and coronary sinus rhythms, P waves and P loops in (Lau et al.), 201
transport and mitral valve blood flow, alterations in, resulting from aortic regurgitation (Nolan et al.), 668
coronary arteriography, selective, modified catheter tip for (Glassman and Roberts), 280 (Annot.)
ventricle, anterolateral papillary muscle of, of the dog, spread of activation in, under normal and pathologic conditions (Burch, Wajszczuk, and Cronvich, 769
ventricular coronary flow, metabolism, and performance in mild congenital heart disease with increased left ventricular flow or pressure (Frank et al.), 20
function during the early and late stages of scar formation following experimental myocardial infarction (Weisse et al.), 370
recovery of, in the healing phase. III. Experimental myocardial infarction (Hood), 531
hypertrophy, vectorcardiographic criteria for diagnosis of (Abbott-Smith and Chou), 361

Left ventricular—Cont'd
myocardium, hypertrophied, contractile state of, in aortic stenosis (Simon et al.), 587
wall motion in normal man, ultrasonic determination of (Kraunz and Kennedy), 36
Letters to Editor, 433, 579

Loop(s), P, and P waves in coronary sinus and left atrial rhythms (Lau et al.), 201
QRS, vectorcardiographic study of, in patients with left anterior focal block (Kulbertus, Collignon, and Humblet), 293

Lung, aging, perfusion defects in (Friedman et al.), 160

M

Magnetic heart vector (Baule and McFee), 223

Mammalian heart, atrium of, studies on the impulse conducting pathways in (Emberson and Challice), 653

Mechanocardiographic index, new, in evaluation of the severity of mitral stenosis; an apexcardiographic study (Oreshkov), 789

Membranacea, pars, aneurysm of (Hamby, Raia, and Apiado), 688

Metabolism, cathecholamine, in essential hypertension (Mendlowitz, Wolf, and Gitlow), 401
left ventricular coronary flow, and performance in mild congenital heart disease with increased left ventricular flow or pressure (Frank et al.), 20

Methyldopa and hydralazine in thiazide-treated hypertensive patients (Aoki and Wilson), 798

Microvascular technique in coronary artery surgery (Green), 276

Mitral regurgitation, congenital, silent (Easthope and Izukawa), 816
stenosis, effect of heart rate on hemodynamics in (Tsagaris and Thorne), 109
evaluation of the severity of, new mechanocardiographic index; an apexcardiographic study (Oreshkov), 789
rheumatic, giant right atrium in (Roberts, Humphries, and Morrow), 28
valve blood flow and left atrial transport, alterations in, resulting from aortic regurgitation (Nolan et al.), 668
leaflet, posterior, prolapsed, morphology of (Trent et al.), 539

Morphology of a prolapsed posterior mitral valve leaflet (Trent et al.), 539

Muscle, papillary, anterolateral, of the left ventricle of the dog, spread of activation in, under normal and pathologic conditions (Burch, Wajszczuk, and Cronvich), 769

Myocardial infarction, acute, arterial oxygen tension in; serial analysis of clinical state and blood gas changes (Fillmore, Shapiro, and Killip), 620
associated with atrial fibrillation; a study of 34 cases (Klass and Haywood), 752
bundle branch block in (Norris and Croxson), 728
intermittent complete heart block associated with swallowing as complication of (Ragaza, Rectra, and Pardi), 396
patients with, hospital registration in (Sloman and Brown), 761

Myocardial infarction—Cont'd
analgesics in (Lal, Savidge, and Davies), 717 (Annot.)
experimental, left ventricular function during the early and late stages of scar formation following (Weisse et al.), 370
III. Recovery of left ventricular function in the healing phase; contribution of increased fiber shortening in noninfarcted myocardium (Hood), 531
isoproterenol-induced, serum creatine phosphokinase activity following, in male and female rats with and without arteriosclerosis (Wexler), 69
with normal selective coronary arteriograms (Campeau), 139 (Annot.)
recognition of, by means of Frank lead Q/R ratios (Sotobata, Richman, and Simonson), 508
transient electrocardiographic changes simulating, during open-heart surgery (Klein, Gross, and Rubin), 463
necrosis, experimental, effects of dimethylsulfoxide (DMSO) on healing of (Leon, Bloor, and Pitt), 384
structure and composition, effects of isoproterenol infusion on (Barner, Jellinek, and Kaiser), 237

Myocardio-selective beta-receptor blockade by ICI 50172, coronary and hemodynamic effects of, in the closed-chest dog (Bussmann, Rauh, and Krayenbuehl), 347

Myocardium, left ventricular, hypertrophied, contractile state of, in aortic stenosis (Simon et al.), 587
noninfarcted, contribution of increased fiber shortening in. III. Experimental myocardial infarction (Hood), 531

Muscle, heart, rat and human, oxygen consumption and contractility of, effect of hypothermia and anoxia upon (Tsifutis, Burton, and Goldring), 88

N

Necrosis, myocardial, experimental, effects of dimethysulfoxide (DMSO) on healing of (Leon, Bloor, and Pitt), 384

Nervous system, autonomic, effects of angiotensin on (Lowe and Scroop), 562

Neurofibromatosis, acquired right ventricular outflow obstruction in a child with (Rosenquist et al.), 103

Nicotine, effect of, on coronary circulation of dogs (Ross and Blesa), 96

O

Occlusion, coronary, acute, and the "power failure" syndrome (Walston, Hackel, and Estes), 613
and hypoxemia, effect of: determination of interarterial coronary anastomosis by radioactive spherules (Blum et al.), 244
femoral artery, following percutaneous catheterization (Kloster, Bristow, and Griswold), 175

Open-heart surgery, surface-induced deep hypothermia for, infants undergoing, electrocardiographic changes in (Rittenhouse et al.), 167
transient electrocardiographic changes simulating myocardial infarction during (Klein, Gross, and Rubin), 463

Outflow obstruction, acquired right ventricular, in a child with neurofibromatosis (Rosenquist et al.), 103

Output, cardiac, state, high, hyperthyroidism as (deGroot and Leonard), 265
low, treatment of by continuous infusion of glucagon, clinical evaluation of (Vander Ark and Reynolds), 481

Oxygen consumption and contractility of human and rat heart muscle, effect of hypothermia and anoxia upon (Tsifutis, Burton, and Goldring), 88
tension, arterial, in acute myocardial infarction; serial analysis of clinical state and blood gas changes (Fillmore, Shapiro, and Killip), 620

P

Pacemakers, fixed-rate, use of quinidine with (Nevins et al.), 845 (Annot.)
synchronous standby (demand), competitive rhythms with (Cohen, Morkin, and Aroesty), 332

Pacing, demand, and carotid sinus syncope (Voss and Magnin), 544
missed, emergency management of patients with (Sowton and Barr), 458
transvenous rapid cardiac, and antiarrhythmic drugs, suppression of refractory recurrent ventricular tachycardia by (Friedberg, Lyon, and Donoso), 44

Papillary muscle, anterolateral, of the left ventricle of the dog, spread of activation in, under normal and pathologic conditions (Burch, Wajszczuk, and Cronvich), 769

Paroxysmal ventricular tachycardia, recurrent, treatment of (Dimich et al.), 811

Pars membranacea, aneurysm of (Hamby, Raia, and Apiado), 688

Perfusion defects in the aging lung (Friedman et al.), 160

Pericarditis, chronic constrictive, following uremic hemopericardium (Lindsay, Crawley, and Callaway), 390

Phosphokinase, serum creatine, activity following isoproterenol-induced myocardial infarction in male and female rats with and without arteriosclerosis (Wexler), 69

Physical examination, history taking, and the United States Government (Burch), 848 (Annot.)

Physician and computer, performance of, in analysis of the electrocardiogram (Caceres and Hochberg), 439

Poisoning, chloroquine, acute, effects of, with special reference to the heart (Don Michael and Aiwazzadeh), 831

Positions, cardiac (Daves and Pryor), 408

Pressure, blood, new method for measurement of, in clinical shock (Zahir and Gould), 572 (Annot.)

Prognostic index, coronary, new (Norris et al.), 428 (Annot.)

Propranolol as an antihypertensive agent (Prichard), 128
in the treatment of hyperkinetic heart syndrome, idiopathic hypertrophic subaortic stenosis, and systemic hypertension (Rosenblum and Delman), 134

Prosthetic valve replacement and heterograft, hemolysis after (Roeser, Powell, and O'Brien), 281 (Annot.)

Pulmonary artery constriction (banding), spontaneous closure of ventricular septal defect following (Stark, Tynan, and Aberdeen), 548
circulation, abnormal of dog, effects of cardiac glycosides on (Momma et al.), 80
disease, chronic obstructive, P-wave changes in (Calatayud et al.), 444
embolism, major, acute, streptokinase therapy in (Hirsh, McDonald, and Hale), 574 (Annot.)
and general hemodynamics, effect of acute thermal stress on, in the cardiac patient (El Sherif, Shahwan, and Sorour), 305
hypertension and health, second heart sound in (Harris), 145

Pulses—visible and palpable (Hardison and Shapiro), 431 (Annot.)

P-wave(s) changes in chronic obstructive pulmonary disease (Calatayud et al.), 444
and P loops in coronary sinus and left atrial rhythms (Lau et al.), 201

Pyridinolcarbamate, antiatherosclerotic agent, clinical pharmacologic evaluation of; a double-blind crossover trial in treatment of atherosclerosis obliterans (Shimamoto et al.), 5
pretreatment and electrocardiographic and hematological changes by exercise test in coronary patients; a double-blind crossover trial (Yamazaki et al.), 640

Q

Q/R ratios, Frank lead, recognition of myocardial infarction by means of (Sotobata, Richman, and Simonson), 508

QRS loop, vectorcardiographic study of, in patients with left anterior focal block (Kulbertus, Collignon, and Humblet), 293

Quinidine, use of, with fixed-rate pacemakers (Nevins et al.), 845 (Annot.)

R

Radioactive spherules, determination of interarterial coronary anastomosis by; effect of coronary occlusion and hypoxemia (Blum et al.), 244

Rat(s) and human heart muscle, effect of hypothermia and anoxia upon oxygen consumption and contractility of (Tsifutis, Burton, and Goldring), 88
male and female, with and without arteriosclerosis, serum creatine phosphokinase activity following isoproterenol-induced myocardial infarction in (Wexler), 69

Regurgitation, aortic, alterations in left atrial transport and mitral valve blood flow resulting from (Nolan et al.), 668
mitral, congenital, silent (Easthope and Izukawa), 816

Repolarization boundaries, ventricular, geometry of (Burgess, Millar, and Abildskov), 524

Rheumatic mitral stenosis, giant right atrium in (Roberts, Humphries, and Morrow), 28

Rhythm(s), A-V nodal, triple, digitalis-induced, unusual form of (Chung), 250
coronary sinus and left atrial, P waves and P loops in (Lau et al.), 201

Right, acquired, ventricular outflow obstruction in a child with neurofibromatosis (Rosenquist et al.), 103
atrium, giant, in rheumatic mitral stenosis (Roberts, Humphries, and Morrow), 28
phasic, and superior vena cava flow velocity in patients with tricuspid insufficiency (Benchimol, Barreto, and Tio), 603
ventricle; this is interesting (Burch), 721 (Annot.)

S

Scar formation, early and late stages of, left ventricular function during, following experimental myocardial infarction (Weisse et al.), 370

Second heart sound in health and in pulmonary hypertension (Harris), 145

Septal defect, ventricular, electrocardiogram, vectorcardiogram, and hemodynamics in (Witham and McDaniel), 335
spontaneous closure of, following pulmonary artery constriction (banding), (Stark, Tynan, and Aberdeen), 548

Septum, ventricular, membranous, aneurysm of (Pombo, Pilapil, and Lehan), 188
congenital aneurysm of, associated with partial trisomy E syndrome (Chesler et al.), 805

Serum calcium and digitalis, synergistic relationship between, assessment of (Nola, Pope, and Harrison), 499

Shock, clinical, blood pressure in, new method for measurement of (Zahir and Gould), 572 (Annot.)

Shunt, ventriculoatrial, infected, diffuse glomerulonephritis associated with (Stickler et al.), 426 (Annot.)

Sinus, carotid, syncope and demand pacing (Voss and Magnin), 544
coronary, and left atrial rhythms, P waves and P loops in (Lau et al.), 201

Sound, heart, second, in health and in pulmonary hypertension (Harris), 145

Stenosis, aortic, of varying severity, patients with, hemodynamic changes at rest and during exercise in (Lee et al.), 318
idiopathic hypertrophic subaortic, hyperkinetic heart syndrome, and systemic hypertension, propranolol in the treatment of (Rosenblum and Delman), 134
mitral, effect of heart rate on hemodynamics in (Tsagaris and Thorne), 109
evaluation of severity of, new mechanocardiographic index: an apexcardiographic study (Oreshkov), 789
rheumatic, giant right atrium in (Roberts, Humphries, and Morrow), 28

Stenotic and innocent cervical bruits, characteristics of (Townes, Bowers, and Braun), 734

Streptokinase therapy in acute major pulmonary embolism (Hirsh, McDonald, and Hale), 574 (Annot.)

Subaortic stenosis, idiopathic hypertrophic, hyperkinetic heart syndrome, and systemic hypertension, propranolol in the treatment of (Rosenblum and Delman), 134

Surgery, coronary artery, microvascular technique in (Green), 276

Surgery—Cont'd
open-heart, surface-induced deep hypothermia for, infants undergoing, electrocardiographic changes in (Rittenhouse et al.), 167
transient electrocardiographic changes simulating myocardial infarction during (Klein, Gross, and Rubin), 463

Swallowing with intermittent complete heart block as complication of acute myocardial infarction (Ragaza, Rectra, and Pardi), 396

Syncope, carotid sinus, and demand pacing (Voss and Magnin), 544

Synergistic relationship between serum calcium and digitalis, assessment of (Nola, Pope, and Harrison), 499

Systemic hypertension, hyperkinetic heart syndrome, and idiopathic hypertrophic subaortic stenosis, propranolol in the treatment of (Rosenblum and Delman), 134

T

Tachycardia, refractory recurrent ventricular, suppression of, by transvenous rapid cardiac pacing and antiarrhythmic drugs (Friedberg, Lyon, and Donoso), 44
ventricular, paroxysmal, recurrent, treatment of (Dimich et al.), 811

Temperature, body, changes in, and exercise, effects of, on the intrinsic heart rate in man (Jose, Stitt, and Collison), 488

Terminology, cardiac. (*See* under Cardiac positions).

Thermal stress, acute, effect of on general and pulmonary hemodynamics in the cardiac patient (El Sherif, Shahwan, and Sorour), 305

Thiazide-treated hypertensive patients, hydralazine and methyldopa in (Aoki and Wilson), 798

Thoracic, cardiac, impedance waveform, physiological correlates of (Karnegis and Kubicek), 519

Tone, heart (Burch and Giles), 283 (Annot.)

Toxicity, digitalis, and hypomagnesemia (Seller et al.), 57

Tricuspid insufficiency, phasic right atrium and superior vena cava flow velocity in patients with (Benchimol, Barreto, and Tio), 603

Trisomy E syndrome, partial, associated with congenital aneurysm of the membranous ventricular septum (Chesler et al.), 805

Twins, hypertension in, study of (VanderMolen et al.), 454

U

Ugandan African, corneal arcus in (Cook and Kanyerezi), 718 (Annot.)

Ultrasonic determination of left ventricular wall motion in normal man (Kraunz and Kennedy), 36

United States Government, history taking, and the physical examination (Burch), 848 (Annot.)

Uremic hemopericardium, chronic constrictive pericarditis following (Lindsay, Crawley, and Callaway), 390

V

Valve leaflet, mitral, posterior, prolapsed, morphology of (Trent et al.), 539
mitral, blood flow and left atrial transport, alterations in, resulting from aortic regurgitation (Nolan et al.), 668
prosthetic, replacement and heterograft, hemolysis after (Roeser, Powell, and O'Brien), 281 (Annot.)

Vascular hamartoma of the heart in a child (Franciosi, Gay, and Ah-Tye), 676
and hemodynamic responses to antihypertensive treatment with adrenergic blocking agents: a review (Sannerstedt and Conway), 122

Vasculitis with allopurinol therapy (Jarzobski et al.), 116

Vector, cardiac, indicator (Green and Macfarlane), 849 (Annot.)
heart, magnetic (Baule and McFee), 223

Vectorcardiogram, electrocardiogram, and hemodynamics in ventricular septal defect (Witham and McDaniel), 335
past forty (Witham and Lahman), 149

Vectorcardiographic criteria for the diagnosis of left ventricular hypertrophy (Abbott-Smith and Chou), 361
study of the QRS loop in patients with left anterior focal block (Kulbertus, Collignon, and Humblet), 293

Vena cava, superior, flow velocity and phasic right atrium in patients with tricuspid insufficiency (Benchimol, Barreto, and Tio), 603

Venous bypass grafts for occlusive disease of the coronary arteries (Spencer), 568

Ventricle, left, anterolateral papillary muscle of the dog, spread of activation in, under normal and pathologic conditions (Burch, Wajszczuk, and Cronvich), 769

Ventricular, acquired right, outflow obstruction in a child with neurofibromatosis (Rosenquist et al.), 103
coronary, left, flow, metabolism, and performance in mild congenital heart disease with increased left ventricular flow or pressure (Frank et al.), 20
left, function, during the early and late stages of scar formation following experimental myocardial infarction (Weisse et al.), 370
recovery of, in the healing phase. III. Experimental myocardial infarction (Hood), 531
hypertrophy, vectorcardiographic criteria for diagnosis of (Abbott-Smith and Chou), 361
myocardium, hypertrophied, contractile state of, in aortic stenosis (Simon et al.), 587
wall motion in normal man, ultrasonic determination of (Kraunz and Kennedy), 36
repolarization boundaries, geometry of (Burgess, Millar, and Abildskov), 524
septal defect, electrocardiogram, vectorcardiogram, and hemodynamics in (Witham and McDaniel), 335
spontaneous closure of, following pulmonary artery constriction (banding), Stark Tynan, and Aberdeen), 548
septum, membranous, aneurysm of (Pombo, Pilapil, and Lehan), 188
congenital aneurysm of, associated with partial trisomy E syndrome (Chesler et al.), 805

Ventricular—Cont'd
tachycardia, paroxysmal, recurrent, treatment of (Dimich et al.), 811
refractory recurrent, suppression of, by transvenous rapid cardiac pacing and antiarrhythmic drugs (Friedberg, Lyon, and Donoso), 44

Ventriculoatrial shunt, infected, diffuse glomerulonephritis associated with (Stickler et al.), 426 (Annot.)

Vessels, great; this is interesting (Burch), 721 (Annot.)

W

Wave(s), P-, changes in chronic obstructive pulmonary disease (Calatayud et al.), 444
and P loops in coronary sinus and left atrial rhythms (Lau et al.), 201
form, impedance, cardiac thoracic, physiological correlates of (Karnegis and Kubicek), 519
Wenckebach type of atrioventricular block, mechanism of (Schaffer), 138 (Annot.)

X

X-irradiation of the canine heart, electrocardiographic changes following (Badran et al.), 648

American Heart Journal

An international publication for the study of the circulation

GEORGE E. BURCH, M.D.
Editor

HARRY L. COLCOLOUGH, M.D.
NICHOLAS P. DEPASQUALE, M.D.
JOHN H. PHILLIPS, M.D.
Assistant editors

1430 Tulane Avenue, New Orleans, La. 70112
The C. V. Mosby Company, 3207 Washington Blvd., St. Louis, Mo., 63103

International editorial board

Walter H. Abelmann, *Boston*
J. A. Abildskov, *Salt Lake City*
R. P. Ahlquist, *Augusta*
Henry Barcroft, *London*
D. V. Bates, *Montreal*
A. Benchimol, *Phoenix*
S. Gilbert Blount, Jr., *Denver*
Yves Bouvrain, *Paris*
K. Braun, *Jerusalem*
Daniel A. Brody, *Memphis*
Henri Chevalier, *Paris*
Muir Clapper, *Detroit*
James A. Cronvich, *New Orleans*
Arthur C. DeGraff, *New York*
Lewis Dexter, *Boston*
Leonard S. Dreifus, *Philadelphia, Pa.*
E. E. Eddleman, Jr., *Birmingham, Ala.*
Jesse E. Edwards, *St. Paul*
Charles Fisch, *Indianapolis*
Julian Frieden, *New Rochelle, N.Y.*
Arthur Grishman, *New York*
W. Proctor Harvey, *Washington, D.C.*
Paul Hugenholtz, *Rotterdam*
Wlodzimierz Januszewicz, *Warsaw*
Harold A. Kahn, *Bethesda*
P. I. Korner, *Sydney*
Richard Langendorf, *Chicago*
James J. Leonard, *Pittsburgh*
Maurice Lev, *Chicago*
Robert L. Levy, *New York*
Howard P. Lewis, *Portland, Ore.*
Jiri Linhart, *Prague*
Daniel S. Lukas, *New York*
Pavel E. Lukomsky, *Moscow*
W. C. Manion, *Washington, D.C.*
Dwight C. McGoon, *Rochester, Minn.*
Donald Mainland, *New York*
Felipe Mendoza, *Mexico, D. F., Mex.*
Gordon K. Moe, *Utica, N. Y.*
Andrew G. Morrow, *Bethesda*
Clifford V. Nelson, *Portland, Me.*
Edward S. Orgain, *Durham*
Alfred Pick, *Chicago*
Walter H. Pritchard, *Cleveland*
Simon Rodbard, *Duarte*
D. G. Scarpelli, *Kansas City, Kan.*
Leonard Scherlis, *Baltimore*
V. Schrire, *Cape Town*
Ralph C. Scott, *Cincinnati*
Ewald E. Selkurt, *Indianapolis*
Arthur Selzer, *San Francisco*
John T. Shepherd, *Rochester, Minn.*
J. P. Shillingford, *London*
Ernst Simonson, *Minneapolis*
John R. Smith, *St. Louis*
Aly H. Sorour, *Cairo*
Pierre Soulie, *Paris*
Madison S. Spach, *Durham*
Tatsuya Tomomatsu, *Kobe, Japan*
William H. Weidman, *Rochester, Minn.*
R. F. Whelan, *Adelaide*
Ernst Wollheim, *Wurzburg, Germany*
Henry A. Zimmerman, *Cleveland*

VOLUME 80

JULY-DECEMBER, 1970

VOLUME 80
COPYRIGHT © 1970 BY
THE C. V. MOSBY COMPANY

All rights reserved

Printed in the United States of America

Author index*

A

ABILDSKOV, J. A. (*See* Burgess, Grossman, and Abildskov), 112

AGOSTONI, ANGELO, VERGANI, CARLO, STABILINI, ROBERTO, MARASINI, BIANCA, ARCIDIACONO, RAFFAELE, SBAFFI, ANDREA, AND BINAGHI, PIETRO C. Immunochemical quantitation of acute phase reactive proteins in myocardial infarction, 313

AKIMOTO, TOMIO. (*See* Endo et al.), 498

ALPERN, HARVEY L. (*See* Chatterjee et al.), 47

ANDERSEN, A. (*See* Myhre, Rasmussen, and Andersen), 463

ANKENEY, JAY L. (*See* Macleod et al.), 683

ARAÚJO, JORGE, SÁNCHEZ, GILBERTO, GUTIÉRREZ, JAVIER, AND PÉREZ, FERNANDO. Cardiomyopathies of obscure origin in Cali, Colombia, 162

ARCEBAL, AZUCENA G. (*See* Lemberg, Castellanos, and Arcebal), 479

ARCIDIACONO, RAFFAELE. (*See* Agostoni et al.), 313

ASANO, KEN-ICHI. (*See* Eguchi et al.), 242

ASHTON, W. L., AND BOSS, G. Comparison of cardiothoracic ratio by miniature and standard chest radiography, 588

ASPLEN, CHARLES H., AND LEVINE, HAROLD D. Azathioprine therapy of steroid-responsive pericarditis, 109

AWA, SHOICHI, LINDE, LEONARD M., OSHIMA, MASASHIRO, OKUNI, MASAHIKO, MOMMA, KAZUO, AND NAKAMURA, NORIMASA. The significance of late-phased dart T wave in the electrocardiogram of children, 619

B

BADEER, HENRY S. (*See* Stein et al.), 202

BAIN, W. H. (*See* Green et al.), 414

BARLOW, J. B. (*See* Pocock and Barlow), 740

BAUER, GASTON E. (*See* Endrey-Walder et al.), 577 (Annot.)

BAUGH, DAVID. (*See* Tavel et al.), 550

BECK, W. (*See* Chambers, Beck, and Schrire), 677

BENCHIMOL, A., AND TIO, STEPHEN. Early involutionary vectorcardiographic signs of right ventricular hypertrophy, 19

BIGGER, J. THOMAS. (*See* Heissenbuttel and Bigger), 453

BINAGHI, PIETRO C. (*See* Agostoni et al.), 313

BIRNHOLZ, JASON C. (*See* Spangler et al.), 752

BISHOP, M. B., FREE, S. L., DAVIES, J. N. P., AND ALBERT, R. P. The coronary arterial pattern of deer in New York State with special reference to the third (posterior) coronary artery, 785

BISHOP, VERNON S., AND HORWITZ, LAWRENCE D. Left ventricular transverse internal diameter; value in studying left ventricular function, 507

BLOOMFIELD, SAUL. (*See* Kamper et al.), 445

BOBB, GUSTAVUS A. (*See* Damato et al.), 353

BOSS, G. (*See* Ashton and Boss), 588

BRASHEAR, RICHARD E., MANDELBAUM, ISIDORE, AND ROSS, JOSEPH C. Selected cardiovascular effects of adenosine diphosphate, 63

BRISTOW, J. DAVID. (*See* Lewis, Bristow, and Griswold), 171

BROBMANN, GUENTHER F. (*See* Meyer et al.), 846 (Annot.)

BRODSKY, SIDNEY J., KROVETZ, L. JEROME, AND SCHIEBLER, GEROLD L. Assessment of severity of isolated valvar pulmonic stenosis using isoproterenol, 660

BROWN, J. J., DAVIES, D. L., JOHNSON, V. W., LEVER, A. F., AND ROBERTSON, J. I. S. Renin relationships in congestive cardiac failure, treated and untreated, 329

BULLOCH, ROBERT T., MURPHY, MARVIN L., AND PEARCE, MALCOLM B. Fine structural lesions in the myocardium of a beer drinker with reversible heart failure, 629

BURCH, G. E. Of human factors in cardiology, 297

——. Toxic agents and the heart, 142 (Annot.)

——, AND COLCOLOUGH, H. L. Postcardiotomy and postinfarction syndromes; a theory, 290 (Annot.)

——, ——, AND GILES, T. Intracranial lesions and the heart, 574 (Annot.)

——, DEPASQUALE, N. P., AND CRONVICH, J. A. A standard reference system for spatial vectorcardiography; comparison of the equilateral tetrahedron and the Frank systems, 638

——, GILES, T. D., AND COLCOLOUGH, H. L. Pathogenesis of "rheumatic" heart diseases; critique and theory, 556

——. (*See* Phillips and Burch), 125, 268

BURG, FREDERIC D. (*See* Douglass et al.), 197

BURGESS, MARY JO, GROSSMAN, MURRAY, AND ABILDSKOV, J. A. Fibrillation threshold of a patient with myocardial infarction treated with a fixed-rate pacemaker: Case report, 112

BURNS-COX, C. J., AND MACLEAN, J. D. Splenomegaly and blood pressure in an Orang Asli community in West Malaysia, 718 (Annot.)

BUTTERWORTH, J. SCOTT. The clinical diagnosis of ball variance, 287 (Annot.)

C

CARLSTEN, A. (*See* Poupa and Carlsten), 843 (Annot.)

CARP, COSTIN. (*See* Spritzer et al.), 367

CASTELLANOS, AUGUSTIN, JR. (*See* Lemberg, Castellanos, and Arcebal), 479

CHAMBERS, R. J., BECK, W., AND SCHRIRE, V. Complete functional systolic obstruction of the right ventricular outflow in the tetralogy of Fallot, 677

CHATTERJEE, KANU, HARRIS, ALAN, PATRICK, JOHN, ALPERN, HARVEY L., AND DAVIES, MICHAEL. The electrocardiogram in chronic heart block, 47

CHENARD, JACQUES. (*See* Mohiuddin et al.), 532

CHENG, TSUNG O. Physical diagnosis of coronary artery disease, 716 (Annot.)

——. (*See* Tice, Cheng, and Dolgin), 282

CHOU, TE-CHUAN. (*See* Kamper et al.), 445

——. (*See* Romhilt, Susilavorn, and Chou), 237

COHN, KEITH E. (*See* Goldschlager et al.), 610

COLCOLOUGH, H. L. (*See* Burch, Giles, and Colcolough), 556

——. (*See* Burch, Colcolough, and Giles), 574 (Annot.)

——. (*See* Burch and Colcolough), 290 (Annot.)

CONTI, C. RICHARD. (*See* Dagenais, Gundel, and Conti), 544

*July, pp. 1-150; August, pp. 151-296; September, pp. 297-438; October, pp. 439-584; November, pp. 585-722; December, pp. 723-868.

CONWAY, GENE F. (*See* Fowler, Fenton, and Conway), 303
COOPER, JEROME A., AND HASSON, JACK. Clinical pathologic conference, 824
CORREA, PELAYO. (*See* Muñoz and Correa), 319
CRONVICH, J. A. (*See* Burch, DePasquale, and Cronvich), 638
CUTFORTH, ROBERT, WISEMAN, JOSEPHINE, AND SUTHERLAND, R. D. The genesis of the cervical venous hum, 488

D

DAGENAIS, GILLES R., GUNDEL, WALTER D., AND CONTI, C. RICHARD. Peripheral venospasm associated with signs of transient myocardial ischemia, 544
DALLA VOLTA, SERGIO. (*See* Piccolo et al.), 11
DAMATO, ANTHONY N., LAU, SUN H., BOBB, GUSTAVUS A., AND WIT, ANDREW L. Recording of A-V nodal activity in the intact dog heart, 353
DAVIES, D. L. (*See* Brown et al.), 329
DAVIES, MICHAEL. (*See* Chatterjee et al.), 47
DAVIES, R. O. (*See* Mizgala, Khan, and Davies), 428 (Annot.)
DEBLASIO, GUIDO. (*See* Sharnoff and DeBlasio), 848 (Annot.)
DECASTRO, CARLOS, M., HALL, ROBERT J., AND GLASSER, STEPHEN P. Salivary gland hemorrhage; an unusual complication of Coumadin anticoagulation, 675
DEMANY, MARTIAL A., AND ZIMMERMAN, HENRY A. Thrombosis of a mitral disc-valve prosthesis; diagnostic importance of the absent opening click, 816
DEPASQUALE, N. P. (*See* Burch, DePasquale, and Cronvich), 638
DOLGIN, MARTIN. (*See* Tice, Cheng, and Dolgin), 282
DONOSO, EPHRAIM. (*See* Spritzer et al.), 367
DOSSETOR, JOHN B. (*See* Gault and Dossetor), 439
DOUGLASS, JOHN M., STOCK, MICHAEL S., Light, WILLIAM O., AND BURG, FREDERIC D. Licensing the driver with cardiovascular dysfunction, 197
DREIFUS, LEONARD S., AND WATANABE, YOSHIO. Current status of diphenylhydantoin, 709
DUJOVNE, ISABEL. (*See* Pietra et al.), 247

E

EDSON, JOHN N. (*See* Schluger, Iraj, and Edson), 116
EGUCHI, SHOJI, NITTA, HIROSHI, ASANO, KEN-ICHI, TANAKA, MAKOTO, AND HOSHINO, KUNIO. Congenital fistula of the right coronary artery to the left ventricle, 242
EISALO, A. (*See* Karhunen et al.), 820
ENDO, MASAHIRO, YAMAZAKI, TOSHIRO, KONNO, SOJI, HIRATSUKA, HIROO, AKIMOTO, TOMIO, TANAKA, TSUGUHITO, AND SAKAKIBARA, SHIGERU. The direct diagnosis of human myocardial ischemia using ^{131}I-MAA via the selective coronary catheter, 498
ENDREY-WALDER, PETER, HUNTER, PETER R., BAUER, GASTON E., AND STEPHENS, FREDERICK O. Myocardial infarction complicating surgical operations, 577 (Annot.)
ENSELBERG, CHARLES D. Physical activity and coronary heart disease, 137
EVANS, JOHN M. (*See* Gorman and Evans), 515

F

FARBER, PAUL A., AND GLASGOW, LOWELL A. Viral myocarditis during pregnancy; encephalomyocarditis virus infection in mice, 96
FARREHI, CYRUS. Stimulation of the carotid sinus nerve in treatment of angina pectoris, 759
FEIGENBAUM, HARVEY. (*See* Tavel et al.), 550
FENTON, JOHN C. (*See* Fowler, Fenton, and Conway), 303
FISCH, CHARLES. (*See* Tavel et al.), 550
FISHMAN, GIUSEPPE G. (*See* Pietra et al.), 247
FLEMING, J. S. Clinical experience with the Starr-Edwards aortic valve prosthesis, 151
FLESSAS, ATHANASSIOS P., KUMAR, SUDARSHAN, AND SPODICK, DAVID H. Effects of the Valsalva maneuver on the cardiac systolic intervals; beat-to-beat versus timed analysis, 522
FORBES, W. (*See* Green et al.), 414
FOWLER, NOBLE O., FENTON, JOHN C., AND CONWAY, GENE F. Syncope and cerebral dysfunction caused by bradycardia without atrioventricular block, 303
——. (*See* Kamper et al.), 445
FOWLER, P. B. S., IKRAM, H., AND MAINI, R. N. Bradycardiac angina, 288 (Annot.)
FOX, SAMUEL M. (*See* Spangler et al.), 752
FRANK, MARTIN J. (*See* Levinson, Frank, and Schwartz), 791
FRIEDBERG, CHARLES K. (*See* spritzer et al.), 367
FRIEDMAN, NEWTON J. Echocardiographic studies of mitral valve motion. Genesis of the opening snap in mitral stenosis, 177
FURLANELLO, FRANCESCO. (*See* Piccolo et al.), 11

G

GABELMAN, EDWARD H. (*See* Kennedy et al.), 188
GABRIELE, ORLANDO F., AND SCATLIFF, JAMES H. Pulmonary valve calcification, 299
GAULT, M. HENRY, AND DOSSETOR, JOHN B. Kidney transplantation and long-term dialysis, 439
GERBER, PAUL. (*See* Walsh, Gerber, and Purcell), 146 (Annot.)
GILES, T. (*See* Burch, Colcolough, and Giles), 574 (Annot.)
——. (*See* Burch, Giles, and Colcolough), 556
GILMORE, J. P. (*See* Miller and Gilmore), 223
GIULIANI, EMILIO R. (*See* Zitnik and Giuliani), 689
GLASGOW, LOWELL A. (*See* Farber and Glasgow), 96
GLASSER, STEPHEN P. (*See* DeCastro, Hall, and Glasser), 675
GOEL, BRIJ G. (*See* Han, Goel, and Hanson), 778
GOLDSCHLAGER, NORA, SAKAI, F. JOAN, COHN, KEITH E., AND SELZER, ARTHUR. Hemodynamic abnormalities in patients with coronary artery disease and their relationship to intermittent ischemic episodes, 610
——. (*See* Robin and Goldschlager), 103
GOODWIN, J. F. (*See* Pitney, Oakley, and Goodwin), 144 (Annot.)
GORMAN, PATRICK A., AND EVANS, JOHN M. Computer analysis of the electrocardiogram; evaluation of experience in a hospital heart station, 515
GOTSMAN, M. S. (*See* van der Horst, Winship, and Gotsman), 56
——. (*See* Winship et al.), 3
GROSSMAN, MURRAY. (*See* Burgess, Grossman, and Abildskov), 112
GREEN, G. D., FORBES, W., BAIN, W. H., SHAW, G. B., AND KENMURE, A. C. F. Pacemaker lifetime; a review and definitions, based on experience in Glasgow with Chardack-Greatbatch (Medtronic) pacemakers, 414
GREENE, NICHOLAS M. (*See* O'Rourke and Greene), 469
GRISWOLD, HERBERT E. (*See* Lewis, Bristow, and Griswold), 171
GULOTTA, STEPHEN J. Chlorpromazine in the treatment of cardiogenic shock, 570
GUNDEL, WALTER D. (*See* Dagenais, Gundel, and Conti), 544
GUTIÉRREZ, Javier. (*See* Araújo et al.), 162

H

HALL, ROBERT J. (*See* DeCastro, Hall, and Glasser), 675

HAN, JAOK, GOEL, BRIJ G., AND HANSON, CATHERINE S. Re-entrant beats induced in the ventricle during coronary occlusion, 778
HANSON, CATHERINE S. (*See* Han, Goel, and Hanson), 778
HARRIS, ALAN. (*See* Chatterjee et al.), 47
HARRISON, DONALD C. (*See* Ridges and Harrison), 575 (Annot.)
HARTHORNE, J. WARREN. (*See* Smith et al.), 746
HASIN, J. (*See* Rogel et al.), 376
HEATH, DONALD. (*See* Shillingford, Kay, and Heath), 562
HEIKKILÄ, J. (*See* Karhumen et al.), 820
HEISSENBUTTEL, ROBERT H., AND BIGGER, J. THOMAS, Jr. The effect of oral quinidine on intraventricular conduction in man; correlation of plasma quinidine with changes in QRS duration, 453
HIRATSUKA, HIROO. (*See* Endo et al.), 498
HOOBLER, S. W. (*See* Romero and Hoobler), 701
HORMAN, MARO J. (*See* Spangler et al.), 752
HORWITZ, LAWRENCE D. (*See* Bishop and Horwitz), 507
HOSHINO, KUNIO. (*See* Eguchi et al.), 242
HOULDER, ANTHONY E. (*See* Winship et al.), 3
HUNTER, PETER R. (*See* Endrey-Walder et al.), 577 (Annot.)

I

ICHINOSE, SUSUMU. (*See* Takagi and Ichinose), 427 (Annot.)
IKRAM, H. (*See* Fowler, Ikram, and Maini), 288 (Annot.)
IRAJ, IRAJ. (*See* Schluger, Iraj, and Edson), 116

J

JACK, IAN. Leukocyte viremia and intrauterine infection, 291 (Annot.)
JACKSON, DAVID H. (*See* Smith et al.), 746
JACOBSON, EUGENE D. (*See* Meyer et al.), 846 (Annot.)
JENSEN, R. A. (*See* Katzung and Jensen), 80
JOHNSON, V. W. (*See* Brown et al.), 329

K

KAMPER, DAVID, CHOU, TE-CHUAN, FOWLER, NOBLE O., WITT, RICHARD L., AND BLOOMFIELD, SAUL. The reliability of electrocardiographic criteria of chronic obstructive lung disease, 445
KARHUNEN, P., LUOMANMÄKI, K., HEIKKILÄ, J., AND EISALO, A. Syncope and Q-T prolongation without deafness; the Romano-Ward syndrome, 820
KASSER, IRWIN S. (*See* Kennedy, Trenholme, and Kasser), 343
KATZUNG, B. G., AND JENSEN, R. A. The depressant action of diphenylhydantoin on electrical and mechanical properties of isolated rabbit and dog atria: Dependence on sodium and potassium, 80
KAY, J. M. (*See* Shillingford, Kay, and Heath), 562
KEDEM, J. (*See* Rogel et al.), 376
KEITH, J. D. (*See* Li and Keith), 432 (Annot.)
KENMURE, A. C. F. (*See* Green et al.), 414
KENNEDY, F. BRYAN, POZEN, THOMAS J., GABELMAN, EDWARD H., TUTHILL, JOSEPH E., AND ZAENTZ, S. Donald. Stroke intensive care; an appraisal, 188
KENNEDY, J. WARD, TRENHOLME, STUART E., AND KASSER, IRWIN S. Left ventricular volume and mass from single-plane cineangiocardiogram; a comparison of anteroposterior and right anterior oblique methods, 343
KEON, WILBERT J. (*See* Tyberg et al.), 89
KHAN, ALAM S. (*See* Mizgala, Khan, and Davies), 428 (Annot.)
KIRSCHBAUM, JACK D. Abdominal aoritis with stenosis (Takayasu's disease) and occlusive superior mesenteric arteritis associated with renal artery stenosis and hypertension, 811
KONNO, SOJI. (*See* Endo et al.), 498
KONNO, SOUJI. (*See* Sakakibara et al.), 385
KROVETZ, L. JEROME. (*See* Brodsky, Krovetz, and Schiebler), 660
——. (*See* Shapiro and Krovetz), 226
KUMAR, SUDARSHAN, AND SPODICK, DAVID H. Study of the mechanical events of the left ventricle by atraumatic techniques; comparison of methods of measurement and their significance, 401
——. (*See* Flessas, Kumar, and Spodick), 522
KUSUMOTO, MIYAKO. (*See* Sakakibara et al.), 385

L

LAU, SUN H. (*See* Damato et al.), 353
LEITER, LOUIS. Combinations of diuretics in the treatment of edema, 422
LEMBERG, LOUIS, CASTELLANOS, AGUSTIN, JR., AND ARCEBAL, AZUCENA G. The use of propranolol in arrhythmias complicating acute myocardial infarction, 479
LEON, DONALD F., SHAVER, JAMES A., and LEONARD, JAMES J. Reflex heart rate control in man, 729
LEONARD, JAMES J. (*See* Leon, Shaver, and Leonard), 729
LEVER, A. F. (*See* Brown et al.), 329
LEVINE, HAROLD D. (*See* Asplen and Levine), 109
LEVINSON, GILBERT E., FRANK, MARTIN J., AND SCHWARTZ, CARL J. The effect of rest and physical effort on the left ventricular burden in mitral and aortic regurgitation, 791
LEVINSON, RICHARD S., MCILDUFF, JOSEPH B., AND REGAN, TIMOTHY J. Comparison of polarizing solution and isovolumic KCl in digitalis-induced ventricular tachycardia, 70
LEVY, ROBERT J. (*See* Rosenquist, Levy, and Rowe), 493
LEWIS, RICHARD P., BRISTOW, J. DAVID, AND GRISWOLD, HERBERT E. Exercise hemodynamics in aortic regurgitation, 171
LI, M. D., AND KEITH, J. D. Spontaneous closure of ventricular septal defect, 432 (Annot.)
LIEBMAN, JEROME. (*See* Macleod et al.), 683
LIGHT, WILLIAM O. (*See* Douglass et al.), 197
LINDE, LEONARD M. (*See* Awa et al.), 619
LOWN, BERNARD. (*See* Whiting and Lown), 210
LUOMANMÄKI, K. (*See* Karhunen et al.), 820

M

MCGOON, DWIGHT C. Response of a cardiovascular surgeon to the editorial of Henry A. Zimmerman, M.D., 586
MCILDUFF, JOSEPH B. (*See* Levinson, McIlduff, and Regan), 70
MACLEAN, J. D. (*See* Burns-Cox and Maclean), 719
MACLEOD, CATHEL A., ANKENEY, JAY L., PERRIN, EUGENE V., NICKEL, STEWART S., AND LIEBMAN, JEROME. Left atrial aneurysm, 683
MAHLER, Y. (*See* Rogel et al.), 376
MAINI, R. N. (*See* Fowler, Ikram, and Maini), 288 (Annot.)
MANDELBAUM, ISIDORE. (*See* Brashear, Mandelbaum, and Ross), 63
MARASINI, BIANCA. (*See* Agostoni et al.), 313
MATTES, LEONARD M. (*See* Spritzer et al.), 367
MEYER, PAUL, MOORE, GEORGE, BROBMANN, GUENTHER F., AND JACOBSON, EUGENE D. Assessment of an electromagnetic catheter-tip velocity meter, 846 (Annot.)
MICHIE, DAVID D. A plea for evaluating hemodynamic functions in dogs without the use of general anesthetic agents, 714 (Annot.)

MILLER, D. T., AND GILMORE, J. P. Influence of diphenylhydantoin on the inotropic and potassium-losing effects of acetyl strophanthidin, 223
MILLER, STEPHEN W. (*See* Spangler et al.), 752
MIZGALA, HENRY F., KHAN, ALAM S., AND DAVIES, R. O. Reflections on the use of propranolol in angina pectoris, 428 (Annot.)
MOHIUDDIN, SYED M., TASKAR, P. K., RHEAULT, MICHEL, ROY, PAUL-E., CHENARD, JACQUES, AND MORIN, YVES. Experimental cobalt cardiomyopathy, 532
MOMMA, KAZUO. (*See* Awa et al.), 619
MOORE, GEORGE. (*See* Meyer et al.), 846 (Annot.)
MORIN, YVES. (*See* Mohiuddin et al.), 532
MUÑOZ, NUBIA, AND CORREA, PELAYO. Arteritis of the aorta and its major branches, 319
MURPHY, MARVIN L. (*See* Bulloch, Murphy, and Pearce), 629
MYHRE, E., RASMUSSEN, K., AND ANDERSEN, A. Serum lactic dehydrogenase activity in patients with prosthetic heart valves; a parameter of intravascular hemolysis, 463

N

NAKAMURA, NORIMASA. (*See* Awa et al.), 619
NAVA, ANDREA. (*See* Piccolo et al.), 11
NICKEL, STEWART S. (*See* Macleod et al.), 683
NITTA, HIROSHI. (*See* Eguchi et al.), 242

O

OAKLEY, CELIA M. (*See* Pitney, Oakley, and Goodwin), 144 (Annot.)
OKUNI, MASAHIKO. (*See* Awa et al.), 619
O'ROURKE, GEORGE W., AND GREENE, NICHOLAS M. Autonomic blockade and the resting heart rate in man, 469
O'ROURKE, ROBERT A. The atrial sound; factors regulating its occurrence and timing, 715 (Annot.)
OSHIMA, MASASHIRO. (*See* Awa et al.), 619

P

PARKE, WESLEY W. The vasa vasorum of the ascending aorta and pulmonary trunk and their coronary-extracardiac relationships, 802
PATRICK, JOHN. (*See* Chatterjee et al.), 47
PEARCE, MALCOLM B. (*See* Bulloch, Murphy, and Pearce, 629
PÉREZ, FERNANDO. (*See* Araújo et al.), 162
PERMUTTI, BRUNO. (*See* Piccolo et al.), 11
PERRIN, EUGENE V. (*See* Macleod et al.), 683
PHILLIPS, J. H., AND BURCH, G. E. Angina cerebri; part I, 125
—— AND ——. Angina cerebri; part II, 268
PICCOLO, ELIGIO, NAVA, ANDREA, FURLANELLO, FRANCESCO, PERMUTTI, BRUNO, AND DALLA VOLTA, SERGIO. Left atrial rhythm. Vectorcardiographic study and electrophysiologic critical evaluation, 11
PIETERSE, PETRUS J. (*See* Winship et al.), 3
PIETRA, GIUSEPPE G., FISHMAN, ALFRED P., DUJOVNE, ISABEL, AND POLLAK, VICTOR E. Clinical pathologic conference, 247
PITNEY, W. R., OAKLEY, CELIA M., AND GOODWIN, J. F. Therapeutic defibrination with Arvin, 144 (Annot.)
POCOCK, W. A., AND BARLOW, J. B. Postexercise arrhythmias in the billowing posterior mitral leaflet syndrome, 740
POLLAK, VICTOR E. (*See* Pietra et al.), 247
POUPA, O., AND CARLSTEN, A. Isoproterenol-induced cardiac lesions in frog heart observed in vivo, 843 (Annot.)
POZEN, THOMAS J. (*See* Kennedy et al.), 188
PRESTON, THOMAS A. A simple clinical method of estimating arterial pulse rise time, 475
PURCELL, ROBERT H. (*See* Walsh, Gerber, and Purcell), 146 (Annot.)

R

RANNIGER, KLAUS. (*See* Ruschhaupt, Thilenius, and Ranniger), 396
RASMUSSEN, K. (*See* Myhre, Rasmussen, and Andersen), 463
REGAN, TIMOTHY J. (*See* Levinson, McIlduff, and Regan), 70
RHEAULT, MICHEL. (*See* Mohiuddin et al.), 532
RIDGES, J. DOUGLAS, AND HARRISON, DONALD C. Nomograms for determination of mixed venous oxygen content and oxygen step-up in atrial septal defect, 575 (Annot.)
ROBERTS, WILLIAM C. Palpation of the breast; a part of the precordial examination, 578 (Annot.)
ROBERTSON, J. I. S. (*See* Brown et al.), 329
ROBIN, ERWIN, AND GOLDSCHLAGER, NORA. Persistence of low cardiac output after relief of high output by thiamine in a case of alcoholic beriberi and cardiac myopathy, 103
ROGEL, S., HASIN, J., KEDEM, J., AND MAHLER, Y. Spontaneous and induced variations in the threshold of excitability in the in vivo dog heart, 376
ROMERO, J. CARLOS, AND HOOBLER, S. W. The renin-angiotensin system in clinical medicine, 701
ROMHILT, DONALD, SUSILAVORN, BHINO, AND CHOU, TE-CHUAN. Unusual electrocardiographic manifestation of pulmonary embolism, 237
ROSENQUIST, GLENN C., LEVY, ROBERT J., AND ROWE, RICHARD D. Right atrial-left ventricular relationships in tricuspid atresia; position of the presumed site of the atretic valve as determined by transillumination, 493
ROSS, JOSEPH C. (*See* Brashear, Mandelbaum, and Ross), 63
ROTENBERG, DONALD A. (*See* Spangler et al.), 752
ROWE, RICHARD D. (*See* Rosenquist, Levy, and Rowe), 493
ROY, PAUL-E. (*See* Mohiuddin et al.), 532
RUSCHHAUPT, DAVID G., THILENIUS, OTTO G., AND RANNIGER, KLAUS. Pulmonary atresia with aneurysmal systemic-pulmonary arterial anastomosis; an angiographic study, 396

S

SAHA, N. C. Study of the P wave in normal and obstructive lung disease in Delhi, 154
ST. PIERRE, J. RAOUL. (*See* Spodick and St. Pierre), 766
SAKAI, F. JOAN. (*See* Goldschlager et al.), 610
SAKAKIBARA, SHIGERU, SEKIGUCHI, MORIE, KONNO, SOUJI, AND KUSUMOTO, MIYAKO. Idiopathic postpartum cardiomyopathy; report of a case with special reference to its ultrastructural changes in the myocardium as studied by endomyocardial biopsy, 385
——. (*See* Endo et al.), 498
——. (*See* Yokoyama, Takao, and Sakakibara), 597
SÁNCHEZ, GILBERTO. (*See* Araújo et al.), 162
SANDERS, CHARLES A. (*See* Smith et al.), 746
SBAFFI, ANDREA. (*See* Agostoni et al.), 313
SCATLIFF, JAMES H. (*See* Gabriele and Scatliff), 299
SCHERMERS, T. G. (*See* van Buchen, Schermers, and van den Berg), 831
SCHIEBLER, GEROLD L. (*See* Brodsky, Krovetz, and Schiebler), 660
SCHILLING, R. S. F. Coronary heart disease in viscose rayon workers, 1
SCHLUGER, JOSEPH, IRAJ, IRAJ, AND EDSON, JOHN N Cardiac pacing in acute myocardial infarction complicated by complete heart block, 116
SCHMITT, KLAUS D. A new approach for a flush system, 218

SCHIRE, V. (*See* Chambers, Beck, and Schrire), 677
SCHUETTE, WILLIAM H. (*See* Stein et al.), 202
SCHWARTZ, CARL J. (*See* Levinson, Frank, and Schwartz), 791
SEKIGUCHI, MORIE. (*See* Sakakibara et al.), 385
SELZER, ARTHUR. Circulation time and venous pressure; routine tests? 142 (Annot.)
——. (*See* Goldschlager et al.), 610
SHAPIRO, GAIL C., AND KROVETZ, L. JEROME. Damped and undamped frequency resposes of underdamped catheter manometer systems, 226
SHARNOFF, J. GEORGE, AND DEBLASIO, GUIDO. Some implications in the successful heparin prophylaxis of sudden cardiopulmonary arrest by thrombosis and embolism, 848 (Annot.)
SHAVER, JAMES A. (*See* Leon, Shaver, and Leonard), 729
SHAW, G. B. (*See* Green et al.), 414
SHILLINGFORD, JOHN P., KAY, J. M., AND HEATH, DONALD. Clinical pathologic conference, 562
SIMMONS, ROGER L. (*See* Spangler et al.), 752
SMITH, RAPHAEL F., JACKSON, DAVID H., HARTHORNE, J. WARREN, AND SANDERS, CHARLES A. Acquired bundle branch block in a healthy population, 746
SMITH, W. G. Coxsackie B myopericarditis in adults, 34
SOLOFF, LOUIS A. Arrhythmias following infusions of fatty acids, 671
SONNENBLICK, EDMUND H. (*See* Tyberg et al.), 89
SPANGLER, RICHARD D., HORMAN, MARC J., MILLER, STEPHEN W., ROTENBERG, DONALD A., BIRNHOLZ, JASON C., SIMMONS, ROGER L., WESTURA, EDWIN, AND FOX, SAMUEL M. A submaximal exercise electrocardiographic test as a method of detecting occult ischemic heart disease, 752
SPODICK, DAVID H., AND ST. PIERRE, J. RAOUL. Pulsus alternans; physiologic study by noninvasive techniques, 766
——. (*See* Flessas, Kumar, and Spodick), 522
——. (*See* Kumar and Spodick), 401
SPRITZER, RUTH C., MATTES, LEONARD M., CARP, COSTIN, WEISENSEEL, ARTHUR, DONOSO, EPHRAIM, AND FRIEDBERG, CHARLES K. Electrocardiographic follow-up of patients with demand pacemakers, 367
STABILINI, ROBERTO. (*See* Agostoni et al.), 313
STEIN, PAUL D., BADEER, HENRY S., SCHUETTE, WILLIAM H., AND ZENCKA, ALLEN E. Velocity of coronary sinus blood flow as an indicator of coronary arterial flow, 202
STEPHENS, FREDERICK O. (*See* Endrey-Walder et al.), 577 (Annot.)
STOCK, MICHAEL S. (*See* Douglass et al.), 197
SUSILAVORN, BHINO. (*See* Romhilt, Susilavorn, and Chou), 237
SUTHERLAND, R. D. (*See* Cutforth, Wiseman, and Sutherland), 488

T

TAKAGI, MAKOTO, AND ICHINOSE, SUSUMU. The electrodes-triangle, 427 (Annot.)
TAKAO, ATSUYOSHI. (*See* Yokoyama, Takao, and Sakakibara), 597
TANAKA, MAKOTO. (*See* Eguchi et al.), 242
TANAKA, TSUGUHITO. (*See* Endo et al.), 498
TASKER, P. K. (*See* Mohiuddin et al.), 532
TAVEL, MORTON E., BAUGH, DAVID, FISCH, CHARLES, AND FEIGENBAUM, HARVEY. Opening snap of the tricuspid valve in atrial septal defect; a phonocardiographic and reflected ultrasound study of sounds in relationship to movements of the tricuspid valve, 550
THILENIUS, OTTO G. (*See* Ruschhaupt, Thilenius, and Ranniger), 396
THOMAS, THOMAS V. Management of acute and subacute renal artery occlusion, 430 (Annot.)
TICE, DAVID A., CHENG, TSUNG O., and DOLGIN, MARTIN. Surgical treatment of post-myocardial infarction scars (ventricular aneurysms), 282
TIO, STEPHEN. (*See* Benchimol and Tio), 19
TRENHOLME, STUART E. (*See* Kennedy, Trenholme, and Kasser), 343
TUTHILL, JOSEPH E. (*See* Kennedy et al.), 188
TYBERG, JOHN V., KEON, WILBERT J., SONNENBLICK, EDMUND H., AND URSCHEL, CHARLES W. Effectiveness of intra-aortic balloon counterpulsation in the experimental low output state, 89

U

UHLEY, HERMAN M. Electrocardiographic telemetry from ambulances, 838
URCHEL, CHARLES W. (*See* Tyberg et al.), 89

V

VAN BUCHEN, F. S. P., SCHERMERS, T. G., and VAN DEN BERG, J. W. The clinical significance of aortic sclerosis, 831
VAN DEN BERG, J. W. (*See* van Buchen, Schermers, and van den Berg), 831
VAN DER HORST, RONALD L., WINSHIP, W. S., AND GOTSMAN, M. S. Congenital heart malformations in the South African Indian, 56
VERGANI, CARLOS. (*See* Agostoni et al.), 313

W

WALKER, ALEXANDER R. P. Problems in studying the epidemiology of coronary heart disease in unsophisticated populations, 725
WALSH, JOHN H., GERBER, PAUL, AND PURCELL, ROBERT H. Viral etiology of the postperfusion syndrome, 146 (Annot.)
WATANABE, YOSHIO. (*See* Dreifus and Watanabe), 709
WEISENSEEL, ARTHUR. (*See* Spritzer et al.), 367
WESTURA, EDWIN. (*See* Spangler et al.), 752
WHITING, RICHARD, AND LOWN, BERNARD. Effect of beta-adrenergic blockade on electrically induced repetitive ventricular responses (RVR) in the digitalized animal, 210
WINSHIP, WILLIAM S., PIETERSE, PETRUS J., HOULDER, ANTHONY E., AND GOTSMAN, MERVYN S. Radioisotope cardiac pool scanning. Assessment of its value in clinical practice, 3
——. (*See* van der Horst, Winship, and Gotsman), 56
WISEMAN, JOSEPHINE. (*See* Cutforth, Wiseman, and Sutherland), 488
WIT, ANDREW L. (*See* Damato et al.), 353
WITT, RICHARD L. (*See* Kamper et al.), 445

Y

YAMAZAKI, TOSHIRO. (*See* Endo et al.), 498
YOKOYAMA, MASAYOSHI, TAKAO, ATSUYOSHI, and SAKAKIBARA, SHIGERU. Natural history and surgical indications of ventricular septal defect, 597
YUDKIN, JOHN, SUCROSE, insulin, and coronary heart disease, 844

Z

ZAENTZ, S. DONALD. (*See* Kennedy et al.), 188
ZENCKA, ALLEN E. (*See* Stein et al.), 202
ZIMMERMAN, HENRY A. And now—Vein grafts, 585
——. (*See* Demany and Zimmerman), 816
ZITNIK, RALPH S., AND GIULIANI, EMILIO R. Clinical recognition of atrial myxoma, 689

Subject index*

A

Abdominal aoritis with stenosis (Takayasu's disease) and occlusive superior mesenteric arteritis associated with renal artery stenosis and hypertension (Kirschbaum), 811

Acetyl strophanthidin, inotropic and potassium-losing effects of, influence of diphenylhydantoin on (Miller and Gilmore), 223

Acids, fatty, arrhythmias following infusions of (Soloff), 671

Acknowledgment to reviewers, 723

Adenosine diphosphate, selected cardiovascular effects of (Brashear, Mandelbaum, and Ross), 63

Adrenergic, beta-, blockade, effect of, on electrically induced repetitive ventricular responses (RVR) in digitalized animal (Whiting and Lown), 210

African, South, Indian, congenital heart malformations in (van der Horst, Winship, and Gotsman), 56

Alcoholic beriberi and cardiac myopathy, case of persistence of low cardiac output after relief of high output by thiamine in (Robin and Goldschlager), 103

Alternans, pulsus; physiologic study by noninvasive techniques (Spodick and St. Pierre), 766

Ambulances, electrocardiographic telemetry from (Uhley), 838

Anastomosis, aneurysmal systemic-pulmonary arterial, pulmonary atresia with; angiographic study (Ruschhaupt, Thilenius, and Ranniger), 396

Anesthetic agents, general, plea for evaluating hemodynamic functions in dogs without use of (Michie), 714 (Annot.)

Aneurysm(s), atrial, left (Macleod et al.), 683
ventricular, post-myocardial infarction scars, surgical treatment of (Tice, Cheng, and Dolgin), 282

Aneurysmal systemic-pulmonary arterial anastomosis, pulmonary atresia with; angiographic study (Ruschhaupt, Thilenius, and Ranniger), 396

Angina, bradycardiac (Fowler, Ikram, and Maini), 288 (Annot.)
cerebri, I (Phillips and Burch), 125
part II (Phillips and Burch), 268
pectoris, reflections on use of propranolol in (Mizgala, Khan, and Davies), 428 (Annot.)
stimulation of carotid sinus nerve in treatment of (Farrehi), 759

Angiotension-renin system in clinical medicine (Romero and Hoobler), 701

Announcements, 150, 296, 584

Anticoagulant. (*See* under Defibrination.)

Anticoagulation, Coumadin, unusual complication of salivary gland hemorrhage (DeCastro, Hall, and Glasser), 675

Aoritis, abdominal, with stenosis (Takayasu's disease) and occlusive superior mesenteric arteritis associated with renal artery stenosis and hypertension (Kirschbaum), 811

Aorta, arteritis of, and its major branches (Muñoz and Correa), 319
ascending, and pulmonary trunk, vasa vasorum of, and their coronary-extracardiac relationships (Parke), 802

Aortic, intra-, balloon counterpulsation, effectiveness of, in experimental low output state (Tyberg et al.), 89
and mitral regurgitation, effect of rest and physical effort on left ventricular burden in (Levinson, Frank, and Schwartz), 791
regurgitation, exercise hemodynamics in (Lewis, Bristow, and Griswold), 171
sclerosis, clinical significance of (van Buchen, Schermers, and van den Berg), 831
valve prosthesis, Starr-Edwards, clinical experience with (Fleming), 151

Arrest, cardiopulmonary, sudden by thrombosis and embolism, implications in successful heparin prophylaxis (Sharnoff and DeBlasio), 848 (Annot.)

Arrhythmias complicating acute myocardial infarction, use of propranolol in (Lemberg, Castellanos, and Arcebal), 479
following infusions of fatty acids (Soloff), 671
postexercise, in billowing posterior mitral leaflet syndrome (Pocock and Barlow), 740

Arterial anastomosis, aneurysmal systemic-pulmonary atresia with; angiographic study (Ruschhaupt, Thilenius, and Ranniger), 396
coronary, pattern of deer in New York State with special reference to third (posterior) coronary artery (Bishop et al.), 785
flow, coronary, velocity of coronary sinus blood flow as indicator of (Stein et al.), 302
pulse, rise time, simple clinical method of estimating (Preston), 475

Arteritis of aorta and its major branches (Muñoz and Correa), 319
occlusive superior mesenteric, associated with renal artery stenosis and hypertension, and abdominal aoritis with stenosis (Takayasu's disease) (Kirschbaum), 811

Artery, coronary, disease, physical diagnosis of (Cheng), 716 (Annot.)
disease, coronary, hemodynamic abnormalities in patients with, and their relationship to intermittent ischemic episodes (Goldschlager et al.), 610
renal, occlusion, acute and subacute, management of (Thomas), 430 (Annot.)
right coronary, to left ventricle, congenital fistula of (Eguchi et al.), 242

Arvin, therapeutic defibrination with (Pitney, Oakley, and Goodwin), 144 (Annot.)

Ascending aorta and pulmonary trunk, vasa vasorum of, and their coronary-extracardiac relationships (Parke), 802

Atraumatic techniques, study of mechanical events of left ventricle by; comparison of methods of measurement of their significance (Kumar and Spodick), 401

*July, pp. 1-150; August, pp. 151-296; September, pp. 297-438; October, pp. 439-584; November, pp. 585-722; December, pp. 723-868.

Atresia, pulmonary, with aneurysmal systemic-pulmonary arterial anastomosis; angiographic study (Ruschhaupt, Thilenius, and Ranniger), 396
tricuspid, right atrial–left ventricular relationships in; position of presumed site of atretic valve as determined by transillumination (Rosenquist, Levy, and Rowe), 493
Atria, rabbit and dog, isolated, depressant action of diphenylhydantoin on electrical and mechanical properties of; dependence on sodium and potassium (Katzung and Jensen), 80
Atrial, left, aneurysm (Macleod et al.), 683
rhythm; vectorcardiographic study and electrophysiologic critical evaluation (Piccolo et al.), 11
myxoma, clinical recognition of (Zitnik and Giuliani), 689
right and left ventricular relationships in tricuspid atresia; position of presumed site of atretic valve as determined by transillumination (Rosenquist, Levy, and Rowe), 493
septal defect, nomograms for determination of mixed venous oxygen content and oxygen step-up in (Ridges and Harrison), 575 (Annot.)
opening snap of tricuspid valve in (Tavel et al.), 550
sound, factors regulating its occurrence and timing (O'Rourke), 715 (Annot.)
Atrioventricular block, bradycardia without, syncope and cerebral dysfunction caused by (Fowler, Fenton, and Conway), 303
Autonomic blockade and resting heart rate in man (O'Rourke and Greene), 469
A-V nodal activity in intact dog heart, recording of (Damato et al.), 353
Azathioprine therapy of steroid-responsive pericarditis (Asplen and Levine), 109

B

Ball variance, clinical diagnosis of (Butterworth), 287 (Annot.)
Beat-to-beat versus timed analysis; effects of Valsava maneuver on cardiac systolic intervals (Flessas, Kumar, and Spodick), 522
Beats, re-entrant, induced in ventricle during coronary occlusion (Han, Goel, and Hanson), 778
Beer drinker with reversible heart failure, fine structural lesions in myocardium of (Bulloch, Murphy, and Pearce), 629
Beta-adrenergic blockade, effect of, on electrically induced repetitive ventricular responses (RVR) in digitalized animal (Whiting and Lown), 210
Billowing posterior mitral leaflet syndrome, post-exercise arrhythmias in (Pocock and Barlow), 740
Block, atrioventricular, bradycardia without, syncope and cerebral dysfunction caused by (Fowler, Fenton, and Conway), 303
bundle branch, acquired, in healthy population (Smith et al.), 746
heart, chronic, electrocardiogram in (Chatterjee et al.), 47
complete, complicating acute myocardial infarction, cardiac pacing in (Schluger, Iraj, and Edson), 116
Blockade, autonomic, and resting heart rate in man (O'Rourke and Greene), 469
beta-adrenergic, effect of, on electrically induced repetitive ventricular responses (RVR) in digitalized animal (Whiting and Lown), 210
Blood flow, sinus, coronary, velocity of, as indicator of coronary arterial flow (Stein et al.), 202
pressure and splenomegaly in Orang Asli community in West Malaysia (Burns-Cox and Maclean), 718
Book reviews, 148, 294, 435, 720
Books received, 582, 721
Bradycardia without atrioventricular block, syncope and cerebral dysfunction caused by (Fowler, Fenton, and Conway), 303
Bradycardiac angina (Fowler, Ikram, and Maini), 288 (Annot.)
Branch block, bundle, acquired, in healthy population (Smith et al.), 746
Breast, palpation of; part of precordial examination (Roberts), 578 (Annot.)
Bundle branch block, acquired, in healthy population (Smith et al.), 746

C

Calcification, pulmonary valve (Gabriele and Scatliff), 299
Cali, Colombia, cardiomyopathies of obscure origin in (Araújo et al.), 162
Cardiac cycle. (*See* under Left ventricular.)
disease. (*See* under atrial myxoma), 689
failure, congestive, renin relationships in, treated and untreated (Brown et al.), 329
output, low, persistence of, after relief of high output by thiamine in case of alcoholic beriberi and cardiac myopathy (Robin and Goldschlager), 103
pacing in acute myocardial infarction complicated by complete heart block (Schluger, Iraj, and Edson), 116
pool scanning, radioisotope; assessment of its value in clinical practice (Winship et al.), 3
systolic intervals, effects of Valsava maneuver on; beat-to-beat versus timed analysis (Flessas, Kumar, and Spodick), 522
Cardiogenic shock, chlorpromazine in treatment of (Gulotta), 570
Cardiology, human factors in (Burch), 297
Cardiomyopathy(ies), cobalt, experimental (Mohiuddin et al.), 532
hypertrophic, two x-ray signs helpful in diagnosis of (Robicsek et al.), 606
of obscure origin in Cali, Colombia (Araújo et al.), 162
postpartum, idiopathic; report of case with special reference to its ultrastructural changes in myocardium as studied by endomyocardial biopsy (Sakakibara et al.), 385
Cardiopulmonary arrest, sudden, by thrombosis and embolism, implications in successful heparin prophylaxis (Sharnoff and DeBlasio), 848 (Annot.)
Cardiothoracic ratio, comparison of, by miniature and standard chest radiography (Ashton and Boss), 588
Cardiovascular dysfunction, licensing driver with (Douglass et al.), 197
effects, selected, of adenosine diphosphate (Brashear, Mandelbaum, and Ross), 63
phenomena. (*See* under Left ventricle.)
Care, intensive, stroke; appraisal (Kennedy), 188
Carotid sinus nerve, stimulation of, in treatment of angina pectoris (Farrehi), 759

Catheter, coronary, selective, direct diagnosis of human myocardial ischemia using ^{131}I-MAA via (Endo et al.), 498
manometer systems, underdamped, damped and undamped frequency responses of (Shapiro and Krovetz), 226
-tip velocity meter, electromagnetic, assessment of (Meyer et al.), 846 (Annot.)
Cerebral dysfunction and syncope caused by bradycardia without atrioventricular block (Fowler, Fenton, and Conway), 303
Cerebri, angina, I (Phillips and Burch), 125
II (Phillips and Burch), 268
Cervical venous hum, genesis of (Cutforth, Wiseman, and Sutherland), 488
Chardack-Greatbatch (Medtronic) pacemaker lifetimes, review and definitions, based on experience in Glasgow (Green et al.), 414
Chest radiography, miniature and standard, comparison of cardiothoracic ratio by (Ashton and Boss), 588
Children, electrocardiogram of, significance of late-phased dart T wave in (Awa et al.), 619
Chlorpromazine in treatment of cardiogenic shock (Gulotta), 570
Cineangiocardiogram, single-plane, left ventricular volume and mass from; comparison of anteroposterior and right anterior oblique methods (Kennedy, Trenholme, and Kasser), 343
Circulation time and venous pressure; routine tests? (Selzer), 142 (Annot.)
Click, opening, absent, diagnostic importance of; thrombosis of mitral disc-valve prosthesis (Demany and Zimmerman), 816
Clinical pathologic conference (Cooper and Hasson), 824
(Pietra et al.), 247
(Shillingford, Kay, and Heath), 562
Cobalt cardiomyopathy, experimental (Mohiuddin et al.), 532
Colombia, Cali, cardiomyopathies of obscure origin in (Araújo et al.), 162
Computer analysis of electrocardiogram; evaluation of experience in hospital heart station (Gorman and Evans), 515
Congenital fistula of right coronary artery to left ventricle (Eguchi et al.), 242
heart malformations in South African Indian (van der Horst, Winship, and Gotsman), 56
Coronary arterial pattern of deer in New York state with special reference to third (posterior) coronary artery (Bishop et al.), 785
artery disease, hemodynamic abnormalities in patients with, and their relationship to intermittent ischemic episodes (Goldschlager et al.), 610
physical diagnosis of (Cheng), 716 (Annot.)
right, congenital fistula of, to left ventricle (Eguchi et al.), 242
catheter, selective, direct diagnosis of human myocardial ischemia using ^{131}I-MAA via (Endo et al.), 498
-extracardiac relationships of vasa vasorum of ascending aorta and pulmonary trunk (Parke), 802
heart disease and physical activity (Enselberg), 137
sucrose, and insulin (Yudkin), 844 (Annot).
in unsophisticated populations, problems in studying epidemiology of (Walker), 725
in viscose rayon workers (Schilling), 1
Coronary—Cont'd
occlusion, re-entrant beats induced in ventricle during (Han, Goel, and Hanson), 778
sinus blood flow, velocity of, as indicator of coronary arterial flow (Stein et al.), 202
Coumadin anticoagulation, unusual complication of salivary gland hemorrhage (DeCastro, Hall and Glasser), 675
Counterpulsation, intra-aortic balloon, effectiveness of, in experimental low output state (Tyberg et al.), 89
Coxsackie B myopericarditis in adults (Smith), 34

D

Damped and undamped frequency responses of underdamped catheter manometer systems (Shapiro and Krovetz), 226
Dart T wave, late-phased, in electrocardiogram of children, significance of (Awa et al.), 619
Deer, coronary arterial pattern of, in New York State with special reference to third (posterior) coronary artery (Bishop et al.), 778
Defibrination, therapeutic with Arvin (Pitney, Oakley, and Goodwin), 144 (Annot.)
Dehydrogenase, serum lactic, activity in patients with prosthetic heart valves; parameter of intravascular hemolysis (Myhre, Rasmussen, and Andersen), 463
Delhi, normal and obstructive lung disease in, study of P wave in (Saha), 154
Demand pacemakers, electrocardiographic follow-up of patients with (Spritzer et al.), 367
Depressant action of diphenylhydantoin on electrical and mechanical properties of isolated rabbit and dog atria; dependence on sodium and potassium (Katzung and Jensen), 80
Dialysis, long-term, and kidney transplantation (Gault and Dossetor), 439
Digitalis-induced ventricular tachycardia, comparison of isovolumic KCl and polarizing solution in (Levinson, McIlduff, and Regan), 70
Digitalized animal, repetitive ventricular responses (RVR) in, electrically induced, effect of beta-adrenergic blockade on (Whiting and Lown), 210
Diphenylhydantoin, current status of (Dreifus and Watanabe), 709
depressant action of, on electrical and mechanical properties of isolated rabbit and dog atria; dependence on sodium and potassium (Katzung and Jensen), 80
influence of on inotropic and potassium-losing effects of acetyl strophanthidin (Miller and Gilmore) 223
Disc-valve, mitral, prosthesis, thrombosis of; diagnostic importance of absent opening click (Demany and Zimmerman), 816
Diuretics, combinations of, in treatment of edema (Leiter), 422
Dog(s) heart, intact, recording of A-V nodal activity in (Damato et al.), 353
in vivo, spontaneous and induced variations in threshold of excitability in (Rogel et al.), 376
plea for evaluating hemodynamic functions in, without use of general anesthetic agents (Michie), 714 (Annot.)
and rabbit atria, isolated, depressant action of diphenylhydantoin on electrical an mechanical properties of; dependence on sodium and potassium (Katzung and Jensen), 80

Driver with cardiovascular dysfunction, licensing (Douglass et al.), 197
Drugs. (*See* under Diuretics.)

E

Echocardiographic studies of mitral valve motion; genesis of opening snap in mitral stenosis (Friedman), 177
Edema, combinations of diuretics in treatment of (Leiter), 422
Edwards, Starr-, aortic valve prosthesis, clinical experience with (Fleming), 151
Effort, physical, and rest, effect of, on left ventricular burden in mitral and aortic regurgitation (Levinson, Frank, and Schwartz), 791
Electrocardiogram of children, significance of late-phased dart T wave in (Awa et al.), 619
in chronic heart block (Chatterjee et al.), 47
computer analysis of; evaluation of experience in hospital heart station (Gorman and Evans), 515
Electrocardiographic criteria of chronic obstructive lung disease, reliability of (Kamper et al.), 445
follow-up of patients with demand pacemakers (Spritzer et al.), 367
manifestation, unusual, of pulmonary embolism (Romhilt, Susilavorn, and Chou), 237
telemetry from ambulances (Uhley), 838
test, submaximal exercise, as method of detecting occult ischemic heart disease (Spangler et al.), 752
Electrodes-triangle (Takagi and Ichinose), 427 (Annot.)
Electromagnetic catheter-tip velocity meter, assessment of (Meyer et al.), 846 (Annot.)
Electrophysiologic critical evaluation and vectorcardiographic study of left atrial rhythm (Piccolo et al.), 11
Embolism, pulmonary, unusual electrocardiographic manifestation of (Romhilt, Susilavorn, and Chou), 237
Encephalomyocarditis virus infection in mice; viral myocarditis during pregnancy (Farber and Glasgow), 96
Endomyocardial biopsy, report of case with special reference to its ultrastructural changes in myocardium as studied by; idiopathic postpartum cardiomyopathy (Sakakibara et al.), 385
Epidemiology of coronary heart disease in unsophisticated populations, problems in studying epidemiology of (Walker) 725
Excitability threshold of, in dog heart in vivo, spontaneous and induced variations in (Rogel et al.), 376
Exercise. *See* under Physical activity.
hemodynamics in aortic regurgitation (Lewis, Bristow, and Griswold), 171

F

Fatty acids, arrhythmias following infusions of (Soloff), 671
Fibrillation threshold of patient with myocardial infarction treated with fixed-rate pacemaker; case report (Burgess, Grossman, and Abildskov), 112
Fistula, congenital, of right coronary artery to left ventricle (Eguchi et al.), 242
Fixed-rate pacemaker, fibrillation threshold of patient with myocardial infarction treated with; case report (Burgess, Grossman, and Abildskov), 112
Flush system, new approach for (Schmitt), 218
Frank and equilateral tetrahedron systems, comparison of; standard reference system for spatial vectorcardiography (Burch, Depasquale, and Cronvich), 638
Frog heart, isoproterenol-induced cardiac lesions in, observed in vivo (Poupa and Carlsten), 843 (Annot.)

G

Gland, salivary, hemorrhage, unusual complication of Coumadin anticoagulation (DeCastro, Hall, and Glasser), 675
Grafts, vein—and now (Zimmerman), 585
Greatbatch-Chardack (Medtronic) pacemaker lifetimes, review and definitions, based on experience in Glasgow (Green et al.), 414

H

Heart block, chronic, electrocardiogram in (Chatterjee et al.), 47
complete, complicating acute myocardial infarction, cardiac pacing in (Schluger, Iraj, and Edson), 116
disease, coronary, and physical activity (Enselberg), 137
and sucrose and insulin (Yudkin), 844 (Annot.)
in unsophisticated populations, problems in studying epidemiology of (Walker), 725
in viscose rayon workers (Schilling), 1
occult ischemic, submaximal exercise electrocardiographic test as method of detecting (Spangler et al.), 752
"rheumatic," pathogenesis of; critique and theory (Burch, Giles, and Colcolough), 556
dog, intact, recording of A-V nodal activity in (Damato et al.), 353
in vivo, spontaneous and induced variations in threshold of excitability in (Rogel et al.), 376
failure, reversible, fine structural lesions in myocardium of beer drinker with (Bulloch, Murphy, and Pearce), 629
frog, isoproterenol-induced cardiac lesions in, observed in vivo (Poupa and Carlsten), 843 (Annot.)
and intracranial lesions (Burch, Colcolough, and Giles), 574 (Annot.)
malformations, congenital, in South African Indian (van der Horst, Winship, and Gotsman), 56
rate, resting, in man, and autonomic blockade (O'Rourke and Greene), 469
station, hospital, evaluation of experience in; computer analysis of electrocardiogram (Gorman and Evans), 515
toxic agents and (Burch), 142 (Annot.)
valves, prosthetic, serum lactic dehydrogenase activity in patients with; parameter of intravascular hemolysis (Myhre, Rasmussen, and Andersen), 463
Hemodynamic(s) abnormalities in patients with coronary artery disease and their relationship to intermittent ischemic episodes (Goldschlager et al.), 610
functions in dogs without use of general anesthetic agents, plea for evaluating (Michie), 714 (Annot.)
exercise, in aortic regurgitation (Lewis, Bristow, and Griswold), 171
Hemolysis, intravascular, parameter of; serum lactic dehydrogenase activity in patients with prosthetic heart valves (Myhre, Rasmussen, and Andersen), 463

Hemorrhage, salivary gland, unusual complication of Coumadin anticoagulation (DeCastro, Hall, and Glasser), 675
Heparin prophylaxis of sudden cardiopulmonary arrest by thrombosis and embolism, implications in (Sharnoff and DeBlasio), 848 (Annot.)
Hum, venous, cervical, genesis of (Cutforth, Wiseman, and Sutherland), 488
Human factors in cardiology (Burch), 297
Hypertrophic cardiomyopathy, two x-ray signs helpful in diagnosis of (Robicsek et al.), 606
Hypertrophy, right ventricular, early involutionary vectorcardiographic signs of (Benchimol and Tio), 19

I

Idiopathic postpartum cardiomyopathy; report of case with special reference to its ultrastructural changes in myocardium as studied by endomyocardial biopsy (Sakakibara et al.), 385
^{131}I-MAA, direct diagnosis of human myocardial ischemia using, via selective coronary catheter (Endo et al.), 498
Immunochemical quantitation of acute phase reactive proteins in myocardial infarction (Agostoni et al.), 313
Indian, South African, congenital heart malformations in (van der Horst, Winship, and Gotsman), 56
Infarction, myocardial, acute, complicated by complete heart block, cardiac pacing in (Schluger, Iraj, and Edson), 116
use of propranolol in arrhythmias complicating (Lemberg, Castellanos, and Arcebal), 479
complicating surgical operations (Endrey-Walder et al.), 577 (Annot.)
fibrillation threshold of patient with, treated with fixed-rate pacemaker; case report (Burgess, Grossman, and Abildskov), 112
immunochemical quanitation of acute phase reactive proteins in (Agostoni et al.), 313
scars, post-myocardial (ventricular aneurysms), surgical treatment of (Tice, Cheng, and Dolgin), 282
Inotropic and potassium-losing effects of acetyl strophanthidin, influence of diphenylhydantoin on (Miller and Gilmore), 223
Insulin, sucrose, and coronary heart disease (Yudkin), 844 (Annot.)
Intensive care, stroke; appraisal (Kennedy), 188
Intra-aortic balloon counterpulsation, effectiveness of, in experimental low output state (Tyberg et al.), 89
Intracranial lesions and heart (Burch, Colcolough, and Giles), 574 (Annot.)
Intrauterine infection and leukocyte viremia (Jack), 291 (Annot.)
Intravascular hemolysis, parameter of; serum lactic dehydrogenase activity in patients with prosthetic heart valves (Myhre, Rasmussen, and Andersen), 463
Intraventricular conduction in man, effect of oral quinidine on; correlation of plasma quinidine with changes in QRS duration (Heissenbuttel and Bigger), 453
Ischemia, myocardial, human, direct diagnosis of, using ^{131}I-MAA via selective coronary catheter (Endo et al.), 498
transient, peripheral venospasm associated with signs of (Dagenais, Gundel, and Conti), 544
Ischemic episodes, intermittent, hemodynamic abnormalities in patients with coronary artery disease and their relationship to (Goldschlager et al.), 610
heart disease, occult, submaximal exercise electrocardiographic test as method of detecting (Spangler et al.), 752
Isoproterenol, assessment of severity of isolated valvar pulmonic stenosis using (Brodsky, Krovetz, and Schiebler), 660
-induced cardiac lesions in frog heart observed in vivo (Poupa and Carlsten), 843 (Annot).

K

Kidney transplantation and long-term dialysis (Gault and Dossetor), 439

L

Leaflet syndrome, billowing posterior mitral, post-exercise arrhythmias in (Pocock and Barlow), 740
Left atrial aneurysm (Macleod et al.), 683
rhythm, vectorcardiographic study and electrophysiologic critical evaluation (Piccolo et al.), 11
ventricle, congenital fistula to, of right coronary artery (Eguchi et al.), 242
study of mechanical events of, by atraumatic techniques; comparison of methods of measurement and their significance (Kumar and Spodick), 401
ventricular burden in mitral and aortic regurgitation, effect of rest and physical effort on (Levinson, Frank, and Schwartz), 791
-right atrial relationships in tricuspid atresia; position of presumed site of atretic valve as determined by transillumination (Rosenquist, Levy, and Rowe), 493
transverse internal diameter; value in studying left ventricular function (Bishop and Horwitz), 507
volume and mass from single-plane cineangiocardiogram, comparison of anteroposterior and right anterior oblique methods (Kennedy, Trenholme, and Kasser), 343
Lesions, cardiac, isoproterenol-induced, in frog heart observed in vivo (Poupa and Carlsten), 843 (Annot.)
intracranial, and heart (Burch, Colcolough, and Giles), 574 (Annot.)
structural, fine, in myocardium of beer drinker with reversible heart failure (Bulloch, Murphy, and Pearce), 629
Letters to the Editor, 147, 294, 434, 580, 851
Leukocyte viremia and intrauterine infection (Jack), 291 (Annot.)
Licensing driver with cardiovascular dysfunction (Douglass et al.), 197
Lung disease, chronic obstructive, reliability of electrocardiographic criteria of (Kamper et al.), 445
normal and obstructive, in Delhi, study of P wave in (Saha), 154

M

Malaysia, West, Orang Asli community in, splenomegaly and blood pressure in (Burns-Cox and Maclean), 718
Manometer systems, catheter, underdamped, damped and undamped frequency responses of (Shapiro and Krovetz), 226
(Medtronic) pacemakers, Chardack-Greatbatch, review and definitions of pacemaker lifetimes, based on experience in Glasgow (Green et al.), 414

Mice, encephalomyocarditis virus infection in; viral myocarditis during pregnancy (Farber and Glasgow), 96
Mitral and aortic regurgitation, effect of rest and physical effort on left ventricular burden in (Levinson, Frank, and Schwartz), 791
disc-valve prosthesis, thrombosis of; diagnostic importance of absent opening click (Demany and Zimmerman), 816
leaflet syndrome, billowing posterior, postexercise arrhythmias in (Pocock and Barlow), 740
valve motion, echocardiographic studies of; genesis of opening snap in mitral stenosis (Friedman), 177
Myocardial function. (*See* under Adenosine diphosphate.)
infarction, acute, complicated by complete heart block, cardiac pacing in (Schluger, Iraj, and Edson), 116
use of propranolol in arrhythmias complicating (Lemberg, Castellanos, and Arcebal), 479
complicating surgical operations (Endrey-Walder et al.), 577 (Annot.)
fibrillation threshold of patient with, treated with fixed-rate pacemaker; case report (Burgess, Grossman, and Abildskov), 112
immunochemical quantitation of acute phase reactive proteins in (Agostoni et al.), 313
ischemia, human, direct diagnosis of, using ^{131}I-MAA via selective coronary catheter (Endo et al.), 498
transient, peripheral venospasm associated with signs of (Dagenais, Gundel, and Conti), 544
post-, infarction (ventricular aneurysms), surgical treatment of (Tice, Cheng, and Dolgin), 282
Myocarditis, viral, during pregnancy; encephalomyocarditis virus infection in mice (Farber and Glasgow), 96
Myocardium of beer drinker with reversible heart failure, fine structural lesions in (Bulloch, Murphy, and Pearce), 629
Myopathy, cardiac, and alcoholic beriberi, case of persistence of low cardiac output after relief of high output by thiamine in (Robin and Goldschlager), 103
cardio-, cobalt, experimental (Mohiuddin et al.), 532
Myopericarditis, Coxsackie B, in adults (Smith), 34
Myxoma, atrial, clinical recognition of (Zitnik and Giuliani), 689

N

Nerve, carotid sinus, stimulation of, in treatment of angina pectoris (Farrehi), 759
New York State, coronary arterial pattern of deer in, with special reference to third (posterior) coronary artery (Bishop et al.), 785
Nodal, A-V, activity in intact dog heart, recording of (Damato et al.), 353

O

Occlusion, coronary, re-entrant beats induced in ventricle during (Han, Goel, and Hanson), 778
renal artery, acute and subacute, management of (Thomas), 430 (Annot.)
Occult ischemic heart disease, submaximal exercise electrocardiographic test as method of detecting (Spangler et al.), 752
Opening click, absent, diagnostic importance of; thrombosis of mitral disc-valve prosthesis (Demany and Zimmerman), 816
Opening—Cont'd
snap in mitral stenosis, genesis of; echocardiographic studies of mitral valve motion (Friedman), 177
of tricuspid valve in atrial septal defect (Tavel et al.), 550
Orang Asli community in West Malaysia, splenomegaly and blood pressure in (Burns-Cox and Maclean), 718
Output, cardiac, low, persistence of, after relief of high output by thiamine in case of alcoholic beriberi and cardiac myopathy (Robin and Goldschlager), 103
low, experimental, effectiveness of intra-aortic balloon counterpulsation in (Tyberg et al.), 89
Oxygen content, venous, mixed, and oxygen step-up in atrial septal defect, nomograms for determination of (Ridges and Harrison), 575 (Annot.)

P

P wave in normal and obstructive lung disease in Delhi, study of (Saha), 154
Pacemaker(s), Chardack-Greatbatch (Medtronic), lifetimes, review and definitions, based on experience in Glasgow (Green et al.), 414
demand, electrocardiographic follow-up of patients with (Spritzer et al.), 367
fixed-rate, fibrillation threshold of patient with myocardial infarction treated with; case report (Burgess, Grossman, and Abildskov), 112
lifetimes, review and definitions, based on experience in Glasgow with Chardack-Greatbatch (Medtronic) pacemakers (Green et al.), 414
Pacing, cardiac, in acute myocardial infarction complicated by complete heart block (Schluger, Iraj, and Edson), 116
Palpation of breast; part of precordial examination (Roberts), 578 (Annot.)
Pectoris, angina, reflections on use of propranolol in (Mizgala, Khan, and Davies), 428 (Annot.)
stimulation of carotid sinus nerve in treatment of (Farrehi), 759
Pericarditis, steroid-responsive, azathioprine therapy of (Asplen and Levine), 109
Peripheral venospasm associated with signs of transient myocardial ischemia (Dagenais, Gundel, and Conti), 544
Physical activity and coronary heart disease (Enselberg), 147
Plasma quinidine, correlation of, with changes in QRS duration; effect of oral quinidine on intraventricular conduction in man (Heissenbuttel and Bigger), 453
Polarizing solution and isovolumic KCl, comparison of, in digitalis-induced ventricular tachycardia (Levinson, McIlduff, and Regan), 70
Postcardiotomy and postinfarction syndromes, theory (Burch and Colcolough), 290 (Annot.)
Posterior mitral leaflet syndrome, billowing, postexercise arrhythmias in (Pocock and Barlow), 740
(third) coronary artery, coronary arterial pattern of deer in New York State with special reference to (Bishop et al.), 785
Postinfarction and postcardiotomy syndromes, theory (Burch and Colcolough), 290 (Annot.)
-myocardial infarction scars (ventricular aneurysms), surgical treatment of (Tice, Cheng, and Dolgin), 282

Postinfarction—Cont'd
perfusion syndrome, viral etiology of (Walsh, Gerber, and Purcell), 146
Potassium chloride, isovolumic, and polarizing solution, comparison of, in digitalis-induced ventricular tachycardia (Levinson, McIlduff, and Regan), 70
-losing and inotropic effects of acetyl strophanthidin, influence of diphenylhydantoin on (Miller and Gilmore), 223
and sodium, dependence on; depressant action of diphenylhydantoin on electrical and mechanical properties of isolated rabbit and dog atria (Katzung and Jensen), 80
Precordial examination, palpation of breast as part of (Roberts), 578 (Annot.)
Pregnancy, viral myocarditis during; encephalomyocarditis virus infection in mice (Farber and Glasgow), 96
Pressure, venous, and circulation time; routine tests? (Selzer), 142 (Annot.)
Prophylaxis, heparin, of sudden cardiopulmonary arrest by thrombosis and embolism, implications in (Sharnoff and DeBlasio), 848 (Annot.)
Propranolol in angina pectoris, reflections on use of (Mizgala, Khan, and Davies), 428 (Annot.)
use of, in arrhythmias complicating acute myocardial infarction (Lemberg, Castellanos, and Arcebal), 479
Prosthesis, aortic valve, Starr-Edwards, clinical experience with (Fleming), 151
Prosthetic heart valves, serum lactic dehydrogenase activity in patients with; parameter of intravascular hemolysis (Myhre, Rasmussen, and Andersen), 463
Proteins, acute phase reactive, immunochemical quantitation of, in myocardial infarction (Agostoni et al.), 313
Pulmonary atresia with aneurysmal systemic-pulmonary arterial anastomosis; angiographic study (Ruschhaupt, Thilenius, and Ranniger), 396
embolism, unusual electrocardiographic manifestation of (Romhilt, Susilavorn, and Chou), 237
trunk and ascending aorta, vasa vasorum of, and their coronary-extracardiac relationships (Parke), 802
valve calcification (Gabriele and Scatliff), 299
Pulmonic stenosis, valvar, isolated, using isoproterenol, assessment of severity of (Brodsky, Krovetz, and Schiebler), 660
Pulse rise time, arterial, simple clinical method of estimating (Preston), 475
Pulsus alternans; physiologic study by noninvasive techniques (Spodick and St. Pierre), 766

Q

QRS duration, correlation of plasma quinidine with changes in; effect of oral quinidine on intraventricular conduction in man (Heissenbuttel and Bigger), 453
Q-T prolongation and syncope without deafness; Romano-Ward syndrome (Karhunen et al.), 820
Quinidine, oral, effect of, on intraventricular conduction in man; correlation of plasma quinidine with changes in QRS duration (Heissenbuttel and Bigger), 453

R

Rabbit and dog atria, isolated, depressant action of diphenylhydantoin on electrical and mechanical properties of; dependence on sodium and potassium (Katzung and Jensen), 80
Rabbit—Cont'd
Radiography, chest, miniature and standard, comparison of cardiothoracic ratio by (Ashton and Boss), 588
Radioisotope cardiac pool scanning; assessment of its value in clinical practice (Winship et al.), 3
Rayon, viscose, workers, coronary heart disease in (Schilling), 1
Regurgitation, aortic, exercise hemodynamics in (Lewis, Bristow, and Griswold), 171
mitral and aortic, effect of rest and physical effort on left ventricular burden in (Levinson, Frank, and Schwartz), 791
Renal artery occlusion, acute and subacute, management of (Thomas), 430 (Annot.)
Renin-angiotensin system in clinical medicine (Romero and Hoobler), 701
relationships in congestive cardiac failure, treated and untreated (Brown et al.), 329
Rest and physical effort, effect of, on left ventricular burden in mitral and aortic regurgitation (Levinson, Frank, and Schwartz), 791
Resting heart rate in man, and autonomic blockade (O'Rourke and Greene), 469
"Rheumatic" heart disease, pathogenesis of; critique and theory (Burch, Giles, and Colcolough), 556
Rhythm, left atrial; vectorcardiographic study and electrophysiologic critical evaluation (Piccolo et al.), 11
Right atrial–left ventricular relationships in tricuspid atresia; position of presumed site of atretic valve as determined by transillumination (Rosenquist, Levy, and Rowe), 493
coronary artery, congenital fistula of, to left ventricle (Eguchi et al.), 242
ventricular hypertrophy, early involutionary vectorcardiographic signs of (Benchimol and Tio), 19
RVR, repetitive ventricular responses, electrically induced, in digitalized animal, effect of beta-adrenergic blockade on (Whiting and Lown), 210

S

Salivary gland hemorrhage, unusual complication of Coumadin anticoagulation (DeCastro, Hall, and Glasser), 675
Scanning, radioisotope cardiac pool; assessment of its value in clinical practice (Winship et al.), 3
Scars, post-myocardial infarction (ventricular aneurysms), surgical treatment of (Tice, Cheng, and Dolgin), 282
Sclerosis, aortic, clinical significance of (van Buchen, Schermers, and van den Berg), 831
Septal defect, atrial, opening snap of tricuspid valve in (Tavel et al.), 550
ventricular, natural history and surgical indications of (Yokoyama, Takao, and Sakakibara), 597
spontaneous closure of (Li and Keith), 432
Serum lactic dehydrogenase activity in patients with prosthetic heart valves; parameter of intravascular hemolysis (Myhre, Rasmussen, and Andersen), 463
Shock, cardiogenic, chlorpromazine in treatment of (Gulotta), 570
Sinus blood flow, coronary, velocity of, as indicator of coronary arterial flow (Stein et al.), 202

Simus—Cont'd
nerve, carotid, stimulation of, in treatment of angina pectoris (Farrehi), 759
Snap, opening, in mitral stenosis, genesis of, echocardiographic studies of mitral valve motion (Friedman), 177
of tricuspid valve in atrial septal defect (Tavel et al.), 550
Sodium and potassium, dependence on: depressant action of diphenylhydantoin on electrical and mechanical properties of isolated rabbit and dog atria (Katzung and Jensen), 80
Sound, atrial, factors regulating its occurrence and timing (O'Rourke), 715 (Annot.)
Splenomegaly and blood pressure in Orang Asli community in West Malaysia (Burns-Cox and Maclean), 718
Starr-Edwards aortic valve prosthesis, clinical experience with (Fleming), 151
Stenosis, mitral, genesis of opening snap in; echocardiographic studies of mitral valve motion (Friedman), 177
pulmonic, valvar, isolated, assessment of severity of, using isoproterenol (Brodsky, Krovetz, and Schiebler), 660
(Takayasu's disease), abdominal aoritis with, and occlusive superior mesenteric arteritis associated with renal artery stenosis and hypertension (Kirschbaum), 811
Steroid-responsive pericarditis, azathioprine therapy of (Asplen and Levine), 109
Stroke intensive care, appraisal (Kennedy et al.), 188
Strophanthidin, acetyl, inotropic and potassium-losing effects of, influence of diphenylhydantoin on (Miller and Gilmore), 223
Sucrose, insulin, and coronary heart disease (Yudkin), 844 (Annot.)
Surgical treatment of post-myocardial infarction scars (ventricular aneurysms) (Tice, Cheng, and Dolgin), 282
Syncope and cerebral dysfunction caused by bradycardia without atrioventricular block (Fowler, Fenton, and Conway), 303
and Q-T prolongation without deafness; Romano-Ward syndrome (Karhunen et al.), 820
Syndrome(s), billowing posterior mitral leaflet syndrome, postexercise arrhythmias in (Pocock and Barlow), 740
postcardiotomy and postinfarction, theory (Burch and Colcolough), 290 (Annot.)
postperfusion, viral etiology of (Walsh, Gerber, and Purcell), 146
Romano-Ward; syncope and Q-T prolongation without deafness (Karhunen et al.), 820
System, flush, new approach for (Schmitt), 218
Systolic intervals, cardiac, effects of Valsava maneuver on; beat-to-beat versus timed analysis (Flessas, Kumar, and Spodick), 522
obstruction, complete functional, obstruction of right ventricular outflow in tetralogy of Fallot (Chambers, Beck, and Schrire), 677

T

T wave, dart, late-phased, in electrocardiogram of children, significance of (Awa et al.), 619
Tachycardia, ventricular, digitalis-induced, comparison of isovolumic KCl and polarizing solution in (Levinson, McIlduff, and Regan), 70
Takayasu's disease (stenosis), abdominal aoritis with, and occlusive superior mesenteric arteritis associated with renal artery stenosis and hypertension (Kirschbaum), 811
Telemetry, electrocardiographic, from ambulances (Uhley), 838
Tetrahedron, equilateral, and Frank systems, comparison of; standard reference system for spatial vectorcardiography (Burch, DePasquale, and Cronvich), 638
Tetralogy of Fallot, right ventricular outflow in, complete functional systolic obstruction of (Chambers, Beck, and Schrire), 677
Thiamine in case of alcoholic beriberi and cardiac myopathy, persistence of low cardiac output after relief of high output by (Robin and Goldschlager), 103
Thrombosis of mitral disc-valve prosthesis; diagnostic importance of absent opening click (Demany and Zimmerman), 816
Toxic agents and heart (Burch), 142 (Annot.)
Transillumination, position of presumed site of atretic valve as determined by; right atrial–left ventricular relationships in tricuspid atresia (Rosenquist, Levy, and Rowe), 493
Transplantation, kidney, and long-term dialysis (Gault and Dossetor), 439
Tricuspid atresia, right atrial–left ventricular relationships in; position of presumed site of atretic valve as determined by transillumination (Rosenquist, Levy, and Rowe), 493
valve, opening snap of, in atrial septal defect (Tavel et al.), 550

U

Undamped and damped frequency responses of underdamped catheter manometer systems (Shapiro and Krovetz), 226

V

Valsalva maneuver, effects of, on cardiac systolic intervals; beat-to-beat versus timed analysis (Flessas, Kumar, and Spodick), 522
Valvar pulmonic stenosis, isolated, using isoproterenol, assessment of severity of (Brodsky, Krovetz, and Schiebler), 660
Valve(s), ball-, variance. (*See* under Ball variance.)
heart, prosthetic, serum lactic dehydrogenase activity in patients with; parameter of intravascular hemolysis (Myhre, Rasmussen, and Andersen), 463
motion, mitral, echocardiographic studies of; genesis of opening snap in mitral stenosis (Friedman), 177
prosthesis, aortic, Starr-Edwards, clinical experience with (Fleming), 151
pulmonary, calcification (Gabriele and Scatliff), 299
tricuspid, opening snap of, in atrial septal defect (Tavel et al.), 550
Variance, ball, clinical diagnosis of (Butterworth), 287 (Annot.)
Vasa vasorum of ascending aorta and pulmonary trunk and their coronary-extracardiac relationships (Parke), 802
Vectorcardiographic signs, early involutionary, of right ventricular hypertrophy (Benchimol and Tio), 19
study and electrophysiologic critical evaluation of left atrial rhythm (Piccolo et al.), 11
Vectorcardiography, spatial, standard reference system for; comparison of equilateral tetrahedron and the Frank systems (Burch, DePasquale, and Cronvich), 638
Vein grafts—and now (Zimmerman), 585
Velocity meter catheter-tip electromagnetic, assessment of (Meyer et al.), 846 (Annot.)

Venospasm, peripheral, associated with signs of transient myocardial ischemia (Dagenais, Gundel, and Conti), 544
Venous hum, cervical, genesis of (Cutforth, Wiseman, and Sutherland), 488
oxygen content, mixed, and oxygen step-up in atrial septal defect, nomograms for determination of (Ridges and Harrison), 575 (Annot.)
pressure and circulation time; routine tests? (Selzer), 142 (Annot.)
Ventricle, left, study of mechanical events of the, by atraumatic techniques; comparison of methods of measurement and their significance (Kumar and Spodick), 401
re-entrant beats induced in, during coronary occlusion (Han, Goel, and Hanson), 778
left, congenital fistula to, of right coronary artery (Eguchi et al.), 242
Ventricular aneurysms, post-myocardial infarction scars, surgical treatment of (Tice, Cheng, and Dolgin), 282
burden, left, in mitral and aortic regurgitation, effect of rest and physical effort on (Levinson, Frank, and Schwartz), 791
intra-, conduction in man, effect of oral quinidine on; with changes in QRS duration (Heissenbuttel and Bigger), 453
left to right atrial relationships in tricuspid atresia; position of presumed site of atretic valve as determined by transillumination (Rosenquist, Levy, and Rowe), 493
transverse internal diameter; value in studying left ventricular function (Bishop and Horwitz), 507
volume and mass from single-plane cineangiocardiogram, comparison of anteroposterior and right anterior oblique methods (Kennedy, Trenholme, and Kasser), 343
responses, repetitive (RVR), electrically induced, in digitalized animal, effect of beta-adrenergic blockade on (Whiting and Lown), 210
right, hypertrophy, early involutionary vectorcardiographic signs of (Benchimol and Tio), 19
outflow in tetralogy of Fallot, complete functional systolic obstruction of (Chambers, Beck, and Schrire), 677
septal defect, natural history and surgical indications of (Yokoyama, Takao, and Sakakibara), 597
spontaneous closure of (Li and Keith), 432 (Annot.)
tachycardia, digitalis-induced, comparison of isovolumic KCl and polarizing solution in (Levinson, McIlduff, and Regan), 70
Viral etiology of postperfusion syndrome (Walsh, Gerber, and Purcell), 146
myocarditis during pregnancy; encephalomyocarditis virus infection in mice (Farber and Glasgow), 96
Viremia, leukocyte, and intrauterine infection (Jack), 291 (Annot.)

W

Wave, T, dart, late-phased, in electrocardiogram of children, significance of (Awa et al.), 619

X

X-ray signs, two, helpful in diagnosis of hypertrophic cardiomyopathy (Robicsek et al.), 606

KUM